

Department of Planning and Zoning

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TO: Development Review Board
FROM: Scott Gustin *AD*
DATE: April 21, 2015
RE: 15-0801PD; 140 Grove Street

Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. **THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.**

Zone: RL Ward: 1

Owner/Applicant: Ireland Grove Street Properties

Request: Final plat review of PUD to demolish existing concrete plant and buildings, construct 19 new buildings for 232 residential units, clubhouse, and maintenance building with associated road, parking, and site improvements.

Applicable Regulations:

Article 3 (Applications and Reviews), Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Criteria & Guidelines), Article 8 (Parking), Article 9 (Inclusionary and Replacement Housing), Article 10 (Subdivision), and Article 11 (Planned Unit Development)

Recommendation: **Final plat approval** as per, and subject to, the following findings and conditions:

I. Findings

Background Information:

The applicant is seeking final plat approval for a 232-unit residential development, including 19 multi-family buildings, clubhouse, maintenance garage, and associated site improvements. The existing industrial buildings will be demolished and removed. Note that the project name, "Garden Street Apartments," will likely change to "Bayberry Apartments" at the request of the City of South Burlington. This change is requested to avoid name duplication with a residential complex in that city.

The Development Review Board granted preliminary plat approval March 20, 2014. Since that approval was granted, the number of dwelling units has decreased from 245 to the currently proposed 232 units. The proposed building mix has changed to include more smaller buildings and fewer larger buildings. A maintenance garage has also been added to the proposal.

The preliminary plat approval contained the following conditions:

1. This preliminary plat approval in no way grants or implies final plat approval. Final plat application shall be filed in accordance with Section 10.1.9, *Final Plat Approval Process*, of the CDO and per these Conditions of Approval.
2. Prior to final plat application, written acceptance of the proposed public traffic and pedestrian transportation improvements shall be obtained from the Dept. of Public Works. Written approval of the proposed public water and sewer service upgrades shall also be obtained from the Dept. of Public Works.
3. Prior to final plat application, written acceptance of the proposed improvements to Schmanska Park and its parking lot shall be obtained from the Dept. of Parks & Recreation.
4. Prior to final plat application, written acceptance of the proposed street trees along Grove Street shall be obtained from the City Arborist.
5. Prior to final plat application, written acceptance of the single access drive and its sufficiency for emergency service vehicles shall be obtained from the Fire Marshal.
6. Prior to final plat application, a boundary survey by a VT licensed land surveyor shall be provided and shall show all proposed boundary adjustments.
7. Prior to final plat application, the applicant shall contact the Vermont Division for Historic Preservation to inquire as to studies of the area that may indicate heightened archaeological significance.
8. Prior to final plat application, a revised project phasing schedule shall be provided that clearly depicts what will be constructed and when it will be constructed. The phasing schedule shall be consistent with the inclusionary housing requirements of Sections 9.1.18 & 9.1.19 of the CDO. If the inclusionary housing units are to be contained within a single building as presently proposed, the inclusionary housing units must be constructed first. Written acceptance of the proposed inclusionary housing shall be obtained from the city's Housing Trust Fund. The phasing schedule must also provide for the duplex housing units to be built early during the project construction.
9. Prior to final plat application, the site plan shall be substantially revised to strengthen the interior streetscape and to provide for a more gradual transition between smaller buildings to the largest apartment buildings. Doing so may be as recommended in Sec. 6.2.2 (h) of these findings or otherwise.
10. Prior to final plat application, the applicant shall investigate providing a second access into the site to improve connectivity with the surrounding neighborhood. If feasible, the second access shall be depicted on final plat plans.
11. Final plat plans shall depict mechanical equipment, "hot box," and outdoor mailbox details.
12. Final plat plans shall contain consistent building labels between the elevation drawings and site plans. Elevation drawings in the final plat plans shall also include finished grade information on all building sides for all buildings proposed. The final plat plans shall also include accurate perspective drawings. The elevation drawings as presented at preliminary plat are not approvable.
13. Final plat plans shall include a revised clubhouse building design with greater emphasis on perceived verticality.
14. Final plat plans shall include installation details for the proposed exterior building materials.
15. Final plat plans shall depict a concrete public sidewalk across the access drive into the development.
16. Final plat plans shall include information relative to amenities (i.e. water access, tool sheds, etc.) for the community gardens.
17. Final plat plans shall address the feasibility of solar energy or hot water, or at least solar-ready construction, for the development.

18. Final plat plans shall include fixture cut sheets and illumination levels for building entries shall be provided.
19. Final plat plans shall include written approval of the project stormwater management system and erosion prevention and sediment control plan from the Conservation Board and the Stormwater Administrator.
20. The final plat plans shall include a parking management plan per Sec. 8.1.15 of the CDO for the requested parking waiver.
21. The existing 59' tall concrete structure immediately along Grove Street shall be retained and integrated into the project design. Details shall be provided in the final plat plans. Buildings on the lower (eastern) plateau of the property may utilize this structure for a height limit. Buildings on the upper (western) plateau shall not exceed the standard 35' height limit.
22. Prior to final plat approval, Conservation Board shall review the project under Sections 4.5.4 (c) and (d) – riparian and wetland overlay zones.

The final plat plans address these conditions as noted under the pertinent criteria of these findings.

The Conservation Board reviewed this final plat application March 2, 2015. The Board unanimously recommended approval of the project as proposed. The Board noted that it supported the one-entrance plan reflected in the current proposal. The Board also noted that standard erosion prevention and sediment control conditions would apply.

The Design Advisory Board reviewed this final plat application March 10, 2015. The DAB unanimously recommended project approval subject to the following conditions:

1. Dumpster in front of unit H should be moved farther away from the adjacent duplex.
2. Intersperse the inclusionary units throughout the project.
3. Roof (with supports similar to pavilions) should be provided over the Garden Street exterior gang mailbox.
4. Pedestrian path should be added from 1st parking lot at NW corner to Grove Street.
5. As part of final plat approval:
 - a. Revised boundary survey to depict the merger of the two primary parcels on which the proposed development will be built;
 - b. Corrected labeling for the maintenance garage (i.e. should be building Q);
 - c. Depiction and screening of utility meters; and,
 - d. Installation of concrete crosswalks within the development if feasible.

With the exception of conditions 2 and 5(d), the applicant accepts the DAB's recommendations. The applicant asserts that condition 2 is outside of their design review purview and, in fact, it is outside of their purview. The DAB's jurisdiction is noted under Sec. 2.5.1 (b) *Powers and Duties*, of the CDO. It is limited to Article 6 and historic buildings (Sec. 5.4.8). As for condition 5 (d), the applicant wishes to avoid installing concrete crosswalks throughout the development due primarily to maintenance concerns. Over time, the joints between concrete and asphalt become uneven and create problems for snowplows. Striped asphalt crosswalks are common throughout the city. Note that the sidewalks will all be concrete.

Previous zoning actions for this property are noted below.

- 3/20/14, Preliminary plat approval of 245-unit PUD
- 11/10/97, Approval of lot line adjustment with neighboring parcel

Article 3: Applications and Reviews

Part 5, Conditional Use & Major Impact Review:

Sec. 3.5.6, Review Criteria

(a) Conditional Use Review Standards

1. *The capacity of existing or planned community facilities;*

The proposed development will be served by municipal water and sewer. The applicant will install a new municipal water line from Colchester Avenue across Schmanska Park to serve the proposed development. Wastewater within the development will be collected onsite and sent into the municipal system via onsite pump station. The Department of Public Works has issued a wastewater capacity letter to the applicant that verifies sufficient reserve capacity. Public Works has also noted a number of technical details to be addressed as related to the proposed water and wastewater work. All of these details are noted in a February 24, 2015 email from Steve Roy (DPW) to Bryan Currier (applicant engineer). The requirements noted in this email will be incorporated as conditions of permit approval. Note that a state wastewater permit will be needed prior to construction.

The Office of the City Fire Marshal has reviewed and commented on the final plat plans. Correspondence dated November 14, 2014 notes items that have successfully been addressed in the final plat plans. This correspondence (from Barry Simays to Scott Gustin) specifically notes the acceptability of the proposed access drive. Subsequent correspondence dated March 26, 2015 (from Barry Simays to Scott Gustin) notes three items to be addressed: adjustment of a fire hydrant location, speed bump design, and BFD radio systems modifications. These items will be incorporated into conditions of approval. **(Affirmative finding as conditioned)**

2. *The character of the area affected;*

The subject property is large at 20+ acres. The character of the area is defined in significant part by the concrete plant that currently occupies the site. The Centennial Woods natural area lies to the west across Grove Street, and Gorge Island lies to the east within the Winooski River. A small residential development consisting of 12 single family residences and a tri-plex lies to the south (built by the same owner of this project), and to the north are residential properties along Grove Street containing a mix of single family, duplex, and multi-family homes.

This criterion calls for consideration of the character of the area as defined by the purpose of the zone within which the project is located. This project is located in the Residential Low Density zone. The purpose statement as articulated in the CDO is as follows.

Sec. 4.4.5 Residential Districts

(a) Purpose:

The Residential Districts are intended to control development in residential districts in order to create a safe, livable, and pedestrian friendly environment. They are also intended to create an inviting streetscape for residents and visitors. Development that places emphasis on architectural details and form is encouraged, where primary buildings and entrances are oriented to the sidewalk, and historic development patterns are reinforced. Parking shall be placed either behind, within, or to the side of structures, as is consistent with the district and/or the neighborhood. Building facades designed for parking shall be secondary to the residential aspect of a structure.

The 5 Residential districts as illustrated in Map 4.4.5-1 are further described as follows:

1. The **Residential Low Density (RL)** district is intended primarily for low-density residential development in the form of single detached dwellings and duplexes. This district is typically characterized by a compact and cohesive residential development pattern reflective of the respective neighborhoods' development history.

This project has evolved over time and has improved significantly. The original sketch plan depicted 6 very large hotel-like structures with little cohesiveness within the development and no relationship to nearby homes. The final plat plans include a mix of building types and a variety of different scales. The duplexes along Grove Street relate well to the scale and character of existing homes along Grove Street. The size of buildings increases gradually further into the development site. All of the residences face the street and all are interconnected with a network of sidewalks, streets, and green spaces. **(Affirmative finding)**

3. Traffic on roads and highways in the vicinity;

A comprehensive traffic analysis was provided as part of the preliminary plat application. That analysis indicated significant traffic generation – 125 AM peak hour trip ends and 154 PM peak hour trip ends. This traffic will be in place of the existing 61 AM peak hour trip ends and 61 PM peak hour trip ends at the concrete plant. The final plat application includes a traffic memo update to the traffic analysis and reflects the reduction in the number of proposed dwelling units. Total anticipated trip generation lessens to 117 AM peak hour and 145 PM peak hour.

The analysis of the eight intersections remains essentially unchanged. The final plat traffic memo states only that any impacts from the project would be slightly less than previously anticipated. Five of the intersections addressed in the traffic analysis are in Burlington: Riverside Ave/Colchester Ave/Mill St, Riverside Ave/Barrett St, Colchester Ave/Barrett St, Barrett St/Chase St., and Grove St/site access. Only the Barrett St/Chase St and Grove St/site access intersections are not signalized. Despite an increase in vehicle trips, the traffic analysis found that none of the intersections would experience a drop in level of service (LOS) as a result of the project, either in the AM, PM, or overall LOS. Two of the intersections, Riverside Ave/ Barrett St and Colchester Ave/Barrett St experience LOS F in the PM peak hour and will continue to. A scoping study of this corridor and related intersections is underway and will form the basis for improvements. As noted below, the applicants must pay for a proportionate share of these improvements.

The traffic analysis also examined the access point into the development from Grove Street. It found that stopping and corner sight distances are acceptable and that no exclusive left-turn lane into the project from Grove Street is warranted. The final plat traffic memo notes that the proposed access drive has been narrowed from ~57' to ~43' at the sidewalk crossing and has been accepted by the Department of Public Works and the Fire Marshal.

A number of pedestrian improvements were also noted in the traffic analysis. They included sidewalk extensions, new and improved crosswalks, and new signage. The final plat traffic memo notes that a second rapid rectangular flashing beacon will now be installed at the mid-block crossing east of the Schmanska Park parking area. This crossing will be further improved with a bump-out on the east side of the road. Further south, the section of Grove Street proximate to Schmanska Park will be narrowed to 24'.

The traffic analysis recommended incorporation of all of the pedestrian improvements. It also made recommendations relative to intersection signalization, signage, and payment towards improvements at the Colchester Ave/Barrett St/Riverside Ave intersection. The Department of Public Works has reviewed the traffic analysis and final plat traffic memo. Public Works accepts the recommendations contained therein as reflected in an April 9, 2015 memo to Planning & Zoning. That memo also requests a number of clarifications to the final plat plans. These clarifications are technical in nature pertaining to items such as the width of crosswalk markings, depth of street asphalt, and the like. These items will be incorporated into conditions of permit approval. This April 9 memo also notes concern with the Grove Street duplex walkways and notes crosswalk striping standards inconsistent with the DAB's recommendation for concrete crosswalks. These items will be addressed under Sec. 6.2.2 (j) of these findings.

The possibility of bus service to/from the development was a significant point of discussion during preliminary plat review. The end result of that discussion was that CCTA may possibly provide service to the development upon completion if there is sufficient demand. CCTA will not commit to providing service beforehand.

Although addressed in greater detail under Sec. 8.1.15 of these findings, it bears noting that the applicant has entered into agreement with Carshare VT to host an onsite Carshare VT vehicle as part of the effort to reduce overall traffic generation and parking demand.

(Affirmative finding as conditioned)

4. Bylaws then in effect;

As conditioned, the final plat application is consistent with applicable city bylaws. **(Affirmative finding)**

5. Utilization of renewable energy resources;

The project will not immediately utilize renewable energy resources. The buildings will be constructed to be solar-ready. **(Affirmative finding)**

6. Cumulative impacts of the proposed use;

While this project is very large, this criterion stipulates that the cumulative impact of housing, where it is allowed, be considered negligible. **(Affirmative finding)**

7. Functional family;

There is no request to exceed the 4-unrelated adult occupancy limit in any of the proposed dwelling units. **(Affirmative finding)**

8. Vehicular access points;

See Sec. 6.2.2 (i).

9. Signs;

The project plans indicate a freestanding sign near the entrance from Grove Street. No details beyond location have been provided. This sign will require a separate zoning permit. Note that directional signage related to internal circulation is also proposed. **(Affirmative finding as conditioned)**

10. Mitigation measures;

The proposed residential development will likely not generate offsite noise or glare substantial enough to require mitigation. **(Affirmative finding)**

11. Time limits for construction;

The applicant has submitted a phasing schedule that includes a total build-out time of just under 4 years. It spans from July 2015 – March 2019. This schedule is significantly shorter than the 7 years contemplated at preliminary plat. The proposed schedule contains 14 distinct phases and includes all buildings, site work, and renovation of the remaining overlook structure. The project narrative and supplemental information outline the phasing schedule's consistency with the inclusionary housing requirements of Sections 9.1.18 and 9.1.19 of the CDO. As required, the proposed phasing schedule includes construction of the duplexes early on. **(Affirmative finding)**

12. Hours of operation and construction;

Hours of operation need not be specified for this residential development.

Proposed hours of construction have been scaled back from those indicated at preliminary plat application. They are Monday – Friday, 7:00 AM – 5:00 PM and Saturday, 8:00 AM – 3:00 PM. No construction activity on Sunday. These days and hours are acceptable and will be incorporated as conditions of approval. **(Affirmative finding as conditioned)**

13. Future enlargement or alterations;

In the event of future enlargement or alteration, permits would be required and reviewed under the regulations then in effect.

14. Performance standards;

Performance standards relating to outdoor lighting and erosion control are addressed under Article 5 of these findings.

15. Conditions and safeguards;

Conditions of approval are included in these findings in order to ensure compliance with the requirements of the CDO.

(b) Major Impact Review Standards

1. Not result in undue water, air, or noise pollution;

A comprehensive stormwater management system is proposed. The system involves a combination of infiltration, collection, and detention. Infiltrative measures are incorporated throughout the project site. Stormwater that does not infiltrate into the ground will be collected and detained in an upgraded stormwater pond at the eastern end of the site. Water from this pond will be released at a controlled rate and ultimately discharge into the Winooski River. The proposed stormwater system is completely disconnected from the city system. The stormwater system has been reviewed by the Conservation Board and has received its final approval from the Stormwater Administrator.

As the proposed use is exclusively residential, no significant air or noise pollution is anticipated. **(Affirmative finding)**

2. Have sufficient water available for its needs;

See Sec. 3.5.6 (a) 1.

3. *Not unreasonably burden the city's present or future water supply or distribution system;*
See Sec. 3.5.6 (a) 1.

4. *Not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;*

An erosion prevention and sediment control plan has been provided. This plan has been reviewed by the Conservation Board and has received its final approval from the Stormwater Administrator.
(Affirmative finding)

5. *Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed;*
See Sec. 3.5.6 (a) 3.

6. *Not cause an unreasonable burden on the city's ability to provide educational services;*

The proposed development may attract families with school age children. The preliminary plat application included an estimate of 18 school-age children based on a January 2007 document issued by VHFA. The 18-child estimate was based on an average of 0.185 children for each of the 99 2-bedroom units and 0 children for the 1-bedroom and efficiency units. While this study is not site-specific, it does affirm the fact that a correlation exists between dwelling unit types and the number of school age children. Specifically, detached single family homes tend to attract the highest proportion of families with school age children, and smaller 1 and 2-bedroom apartment units tend to attract proportionally fewer school age children. The proposed apartments will all be efficiency, 1-, and 2-bedroom units. Impact fees will be paid to help offset impacts to the school system. No comments pertaining to this final plat application have been received from the Burlington School System. **(Affirmative finding)**

7. *Not place an unreasonable burden on the city's ability to provide municipal services;*

The proposed development will generate additional impacts on city services. Review and comment by the Departments of Public Works, Fire, Parks & Recreation, Schools, and Burlington Electric has been solicited. Comments have been received from Public Works, Fire, and Parks & Recreation. As noted under the relevant criteria of these findings, comments have included requirements and recommendations for the project. None have asserted undue adverse impacts.
(Affirmative finding)

8. *Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city;*
See Sec. 6.2.2.

9. *Not have an undue adverse effect on the city's present or future growth patterns nor on the city's fiscal ability to accommodate such growth, nor on the city's investment in public services and facilities;*

The proposed development will replace a large nonconforming industrial use in this residential zone with a new residential use. While the area is not an identified growth center, the area is zoned residential, and replacement of the industrial use with a residential use is consistent with city land use policy. The development is large enough that it will require upgrades to existing city infrastructure. These upgrades will be at the expense of the applicant. **(Affirmative finding)**

10. Be in substantial conformance with the city's municipal development plan;
The final plan plans are in substantial compliance with the Municipal Development Plan.

The development will replace a nonconforming industrial use with residential units in a residential zone (City of Neighborhoods, pg. I-24). It will also leave the Winooski River shoreline and onsite wetlands undisturbed. Improvement to the Centennial Brook corridor and stormwater management are also proposed (City Policies, pg. II-1) by removal of an existing crossing and restoration of the open channel. The development will provide inclusionary housing units (City Policies, pg. IX-1) as required by the Comprehensive Development Ordinance.

The final plat plans include more duplexes clustered along Grove Street. Building sizes step up incrementally further into the development site (and away from Grove Street). The inclusion of these smaller buildings and tighter placement reflects the neighborhood pattern along Grove Street (City of Neighborhoods, pg. I-24). The gradual progression of duplexes to 6-plexes to 20+, 30+, and 40+ unit buildings reflects existing neighborhood proportions of mass and scale while transitioning to larger scale buildings deeper into the development (City Policies, pg. III-1).
(Affirmative finding)

11. Not have an undue adverse impact on the present or projected housing needs of the city in terms of amount, type, affordability and location;

The proposed development will not adversely impact the housing needs of the city. It will provide 232 efficiency, single, and two-bedroom dwelling units. The final plat plans incorporate an improved diversity of housing types. The project will not have an undue adverse impact on the city's housing needs. Inclusionary housing units will be provided as required. **(Affirmative finding)**

12. Not have an undue adverse impact on the present or projected park and recreation needs of the city.

As the development includes significant private open space, relatively modest impacts on the city's park and recreation needs are anticipated. Payment of impact fees will help offset such impacts. In addition, the applicant has worked with the Department of Parks & Recreation to agree on a series of improvements related to the Schmanska Park parking lot and access thereto. The improvements agreed to are articulated in a November 24, 2014 email from Jesse Bridges to Patrick O'Brien. These improvements will be incorporated into conditions of approval. **(Affirmative finding as conditioned)**

Article 4: Maps & Districts

Sec. 4.4.5, Residential Districts:

(a) Purpose

(1) Residential Low Density (RL)

The subject property is located in the RL zone. This zone is primarily intended for low density residential development in the form of single family homes and duplexes. The PUD process enables greater diversity of housing types subject to applicable criteria as noted under Article 11 of these findings. The final plat plans include nine duplexes along Grove Street and provide a transition to progressively larger buildings further into the development. **(Affirmative finding)**

(b) Dimensional Standards & Density

The development contains 232 residential units. The total combined property size is 24.77 acres. Note that the applicant has calculated density and buildable area based on a lot size of 20.87 acres. The difference is related to "lot C." Present ownership of this parcel by Green Mountain Power versus SD Ireland is unclear. As part of this project, GMP is quit claiming the parcel to SD Ireland (the applicant). The 24.77 acre size is wholly inclusive and reflects adjustments related to boundary line adjustments included in this proposal. The base density of 7 units/acre on this 24.77 acre property is 173 housing units. Given the size of the development (i.e. more than 5 units), inclusionary zoning applies. Inclusionary zoning provides for an additional 25%, or 8.75 units per in this case (216 dwelling units). The buildable area of the site is just 14.84 acres and limits density (with inclusionary housing) to 129 dwelling units. Density bonuses are included in this proposal as noted in Sec. 4.4.5 (d) 7 below.

Lot coverage is limited to 35% (with an additional 10% available for decks, patios, and open porches) of the buildable area. As proposed, lot coverage within the buildable area is 42.8%. Applicable development bonuses allow up to 50% coverage.

Front yard setbacks are based on the average of neighboring properties along the same street. In this case, the front yard setback is 14' +/- 5'. The closest duplex along Grove Street complies with this setback at 9.5' from the front property line. Side yard setbacks are 10% of the lot width, up to 20', which is depicted on the site plans. The rear property line is defined by the Winooski River. As a result, a waterfront setback applies. This setback is 75' from the ordinary high water mark. The nearest building to the river is about 190' away.

Building height was a significant concern during the preliminary plat review process. Specifically, the height of the largest apartment buildings exacerbated their massive scale and lack of relationship to their surroundings. There is provision under Sec. 5.2.6, *Building Height Limits* for exception to the standard 35' height limit; however, this provision does not negate design review considerations. The Development Review Board required that all of the buildings on the upper plateau (nearer Grove Street) remain below 35'. The buildings on the lower plateau were allowed to be taller. The final plat plans reflect the DRB's direction. The upper plateau contains a variety of building types, and all remain below 35'. The lower plateau contains three large apartment buildings, the clubhouse/office, and maintenance building. Apartment buildings T and S are slightly below 40' tall, and building R (the tallest) is 49.9' tall. Both the clubhouse/office building and the maintenance building are well under 35' tall. The final plat plans include elevation data and the average finished grade for each building. **(Affirmative finding)**

(c) Permitted & Conditional Uses

The major PUD is subject to conditional use review in the RL zone.

(d) District Specific Regulations

1. Setbacks

No setback encroachments are sought.

2. Height

Not applicable in RL.

3. Lot Coverage

No lot coverage exceptions are sought.

4. Accessory Residential Structures and Uses

The proposed office/clubhouse and maintenance buildings are accessory to the residential development. As such they are subject to the dimensional and design review requirements of the CDO. **(Affirmative finding)**

5. Residential Density

All of the proposed residential units are subject an occupancy limit of 4 unrelated adults or a family as defined in the CDO. **(Affirmative finding)**

6. Uses

Not applicable.

7. Residential Development Bonuses

The applicant is seeking a residential conversion bonus under item D of this criterion. This bonus allows for a maximum of 8 dwelling units/acre for the conversion of a nonresidential use (in this case, a concrete plant) to a residential use subject to two criteria: 1) The structure shall not have previously been converted from a residential use to a nonresidential use. The concrete plant has never been residential. 2) The structure proposed for demolition shall not be listed or eligible for listing on the National or Vermont Register of Historic Places. The concrete plant is not historically significant. Note that this first criterion has been deleted by way of amendment from the current CDO; however, this application is vested under the two-criterion language as noted.

The project, due to the number of proposed dwelling units (i.e. more than 5), is also subject to inclusionary zoning requirements. As a result, a base density of 8.75 dwelling units per acre applies. Inclusionary housing, while a requirement under Article 9, is also a bonus under this section of the ordinance.

These two bonus requests were considered under the preliminary plat review and remain unchanged. Together, the two bonuses result in a density limit of 16.75 units per acre and are under the limits noted in Table 4.4.5-8, *Maximum Density, Lot Coverage and Building Heights with Bonuses*. Based on the buildable area of 14.84 acres, 248 dwelling units is the maximum potential density. The 232 units proposed in this final plat application are under this maximum. **(Affirmative finding)**

Sec. 4.5.4, Natural Resource Protection Overlay (NR) District

(c) District Specific Regulations: Riparian and Littoral Conservation Zone

The subject property is affected by the Riparian and Littoral Conservation Zone for a 250' swath along the length of the Winooski River. This overlay zone also parallels Centennial Brook 100' wide on both sides. The project includes removal of a culvert that creates a choke point on Centennial Brook and will likely benefit the waterway and the wildlife using it. The final plat plans depict these overlay zones as required. No new stormwater outfalls are proposed within these overlay zones. The degree of encroachment into these overlay zones will either remain unchanged or be lessened from existing conditions. The Conservation Board has reviewed the final plat application and recommended approval. **(Affirmative finding)**

(d) District Specific Regulations: Wetland Conservation Zone

The subject property contains extensive wetlands, particularly to the northeast. This overlay includes the wetlands and their associated 100' wide buffer zone. The final plat plans depict the wetlands and their buffer zones. None of the wetlands are directly impacted; however, development will take place within some of the buffer zones. As with the riparian and littoral conservation zone, the degree of encroachment into the wetland buffers will either remain unchanged or will be reduced from existing conditions. As required, an assessment of impacts relative to wetland functions and values has been provided. As noted above, the Conservation Board reviewed the final plat plans and recommended approval. **(Affirmative finding)**

(f) District Specific Regulations: Special Flood Hazard Area

The subject property contains flood plain areas along the Winooski River affected by the special flood hazard area (SFHA). None of the proposed construction will take place within the SFHA. **(Affirmative finding)**

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Sec. 4.4.5 (b) above.

Sec. 5.2.4, Buildable Area Calculation

As the subject property is located within the RL zone and is greater than 2 acres in size, this criterion applies. The final plat plans depict areas of wetlands and steep slopes (15% - 30% and 30% +). The resultant buildable area is 14.84 acres. Density and lot coverage calculations are based upon this figure as required. **(Affirmative finding)**

Sec. 5.2.5, Setbacks

See Sec. 4.4.5 (b) above.

Sec. 5.2.6, Building Height Limits

(b) Exceptions to Height Limits, 1

This criterion allows (permissive, not prescriptive) for new construction to exceed the 35' height limit within parcels containing an existing structure exceeding 35' as of January 1, 2008. A portion of the concrete plant contains a structure of 59' tall that has been in place since before January 1, 2008. The subject structure is immediately adjacent to Grove Street. The applicants had originally sought to demolish this structure; however, the Development Review Board required that it be retained, as it is to be used as a basis for exceeding 35' height.

The final plat plans contain renovation details for this industrial structure. The applicant proposes to transform it into a formalized overlook structure. A small covered pavilion will be installed along with a new memorial marker, landscaping, and walkway to connect it to the public sidewalk and street. The applicant will retain ownership of the structure and will be responsible for its ongoing maintenance. **(Affirmative finding)**

Sec. 5.2.7, Density and Intensity of Development Calculations

See Sec. 4.5.5 above.

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to constitute a nuisance under this criterion. **(Affirmative finding)**

Sec. 5.5.2, Outdoor Lighting

New outdoor lighting will consist of pole-mounted fixtures for parking and circulation areas, and wall-mounted fixtures for building entries. Fixture locations are depicted on project plans, and the proposed lights are acceptable cut-off fixtures. Acceptable illumination levels are indicated in all lighting environments (building entries, parking & circulation, and walkways). The pole-mounted parking & circulation fixtures are all mounted at an acceptable 16.5.' **(Affirmative finding)**

Sec. 5.5.3, Stormwater and Erosion Control

As noted previously, the Conservation Board has reviewed the proposed stormwater management system and erosion control plans. The Board recommended approval of the project. The Stormwater Administrator has issued final approval of the proposed stormwater management plan and erosion control plans. **(Affirmative finding)**

Article 6: Development Review Standards:

Part 1, Land Division Design Standards

Sec. 6.1.2, Review Standards

No new subdivision of land is proposed; however, several lot line adjustments with neighboring properties are included. The required boundary surveys have been submitted and clearly depict the proposed adjustments. The two primary parcels that form the basis of this development; however, continue to read as separate parcels. The applicant's intent is to merge these parcels together. The boundary survey must be revised to include this merger. **(Affirmative finding as conditioned)**

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

The property is bordered by the Winooski River to the north, and Centennial Brook runs through a portion as well. The Riparian & Littoral Conservation Zone that buffers these waterways affects the property. Extensive wetlands are also present on the property, particularly on its eastern end. The associated Wetland Conservation Zone protects these wetlands. The Conservation Board reviewed this project under Sec. 4.5.4, *Natural Resource Protection Overlay District* at their March 2, 2015 meeting and recommended approval. For the purposes of this design review criterion, the proposed development does not infringe on any of the wetlands or waterways running by or through the property. The contiguous stands of forest bordering the development site to the north and east will remain intact. All proposed construction will take place within existing developed area. **(Affirmative finding)**

(b) Topographical alterations

The area to be redeveloped sits on two plateaus; upper by Grove Street and lower set back to the east. A number of retaining walls are proposed, particularly where there are relatively large changes in grade over short distances (i.e. such as into the underground garage entries). These retaining walls will consist of poured "form lined" concrete or a decorative concrete block. The poured concrete walls will have a faux stone finish. It appears the precast block walls will too. While grading and filling is needed for construction throughout the site, the general topography will remain as it presently exists. **(Affirmative finding)**

(c) Protection of important public views

There are no important public views from or through the property. **(Affirmative finding)**

(d) Protection of important cultural resources

The property is not included in the city's map of archeologically sensitive areas (in the Open Space Protection Plan); however, its location along the Winooski River increases the likelihood that prehistoric artifacts may be present. As required by the preliminary plat approval, the applicant consulted with the Vermont Division for Historic Preservation and conducted a site visit on July 11, 2014. No archaeologically sensitive areas were identified within the project footprint.

(Affirmative finding)

(e) Supporting the use of alternative energy

No alternative energy is incorporated into the project design. Solar energy utilization remains a possibility, and as required by the preliminary plat approval, the buildings will be constructed to be solar-ready for rooftop panels. **(Affirmative finding)**

(f) Brownfield sites

The property is included on the Vermont DEC Hazardous Site List. The listing indicates that diesel and heating oil contamination were found but also notes that Site Management Activities were completed in 1999. **(Affirmative finding)**

(g) Provide for nature's events

A stormwater management system is proposed. The system has evolved to include a variety of rain gardens, grassed swales, catch basins and an onsite "wet" pond for attenuation. While runoff from large storms will eventually reach the pond prior to discharge into the Winooski River, provision has been made to allow for infiltration of smaller storm events onsite. Existing discharge points into Centennial Brook will be eliminated. The Conservation Board reviewed and recommended approval of the stormwater management plan at their March 2, 2015 meeting. The proposed stormwater system has been approved by the Stormwater Administrator.

A comprehensive erosion prevention and sediment control plan has been provided. The Conservation Board reviewed and recommended approval of the erosion prevention and sediment control plan at their March 2, 2015 meeting. As with stormwater management, final approval by the Stormwater Administrator has been obtained.

Several areas for snow storage are interspersed throughout the site. All of the residential buildings and the clubhouse feature sheltered entrances. **(Affirmative finding)**

(h) Building location and orientation

The proposed development is large enough that it will essentially result in the establishment of a new neighborhood. The visible public streetscape along Grove Street is an important component; however, equally important is the establishment of a well-defined built environment, functional open spaces, and interconnectivity between these components within this new neighborhood.

The most substantial project changes since preliminary plat approval relate to the proposed buildings and their layout along the interior streets. The preliminary plat approval required that the site plan be substantially revised to strengthen the interior streetscape and provide for a more gradual transition from the relatively small duplexes to the largest apartment buildings. The proposed revisions address this condition.

Duplexes flank the entry into the project and continue north along Grove Street. Another row of duplexes and a 6-plex face the center green. Duplexes and 6-plexes line the entry drive to the first intersection. These smaller buildings reflect the scale of neighboring residences and begin the transition to the larger buildings further into the interior of the development. On the upper plateau, street corners have been hardened, and buildings have been set parallel to the interior roads. All of the buildings are oriented towards the street (either Grove or interior streets) and, further into the development, arranged around a center green. The three largest apartment buildings and the clubhouse are set on the lower plateau, farthest away from Grove Street homes. These larger buildings are orientated towards the interior streets and set parallel thereto. In all cases, the buildings are set close to the interior streets with clearly identifiable entries connected to the walkway network.

Overall, the project revisions achieve the required transition in scale from smaller buildings along Grove Street to the larger buildings set farthest into the interior of the development. The interior streetscape has been strengthened by way of improved building siting, diversification, and orientation. **(Affirmative finding)**

(i) Vehicular access

One existing curb cut will be removed to allow for restoration of the Centennial Brook channel. Doing so will leave one curb cut to serve the development. As required, the applicant investigated the possibility of a second access onto Grove Street. The applicant found that doing so could improve connectivity but would result in minimal sight lines for the second access due to the curve in Grove Street. It would also preclude restoration and daylighting of this portion of Centennial Brook. The single proposed access is the better alternative. Adequacy of this access has been approved by the Fire Marshal. Sight lines and turning radii have been reviewed by the Department of Public Works. **(Affirmative finding)**

(j) Pedestrian access

All proposed buildings have front walkways that connect to the walkway network throughout the development. This interior walkway network connects to the public sidewalk along Grove Street. This public sidewalk will be extended into South Burlington as part of this development. The new duplexes facing Grove Street each have individual front walkways connecting to the public sidewalk. The Department of Public Works is concerned with the walkway stairs in the Grove Street right-of-way for duplexes C and B. DPW notes several alternatives, including a single pedestrian connection for the 4 duplexes along Grove Street or merging connections down to two walkways. The individual walkways connecting to Grove Street best meet the intent of this criterion. Due to grades, removing the steps from the ROW does not appear to be feasible. Keeping the proposed arrangement is acceptable but will require that the applicant enter into a license agreement with the city, subject to review and approval by the City Council.

The final plat plans clearly note the continuation of the concrete public sidewalk across the access drive into the development. Previously, striping had been noted. Within the interior street network, crosswalks are striped. Concrete crosswalks may be preferable if feasible; however, as noted previously, striping is commonplace and adequate. Maintenance is required to keep the striping fresh and functional.

Pedestrian routes from parking areas are depicted on the project plans. As recommended by the DAB, a pedestrian path should be added from the northwest corner of the duplexes' parking lot to Grove Street. **(Affirmative finding as conditioned)**

(k) Accessibility for the handicapped

Handicap parking spaces are depicted on the site plans. The buildings will require handicap accessible features per the ADA as administered through the city's building code. **(Affirmative finding)**

(l) Parking and circulation

Parking will be provided underneath the 6 largest buildings, along the interior streets, and in several surface parking lots. Parking along the interior streets is mostly parallel, buildings are oriented towards the streets or center green with parking behind, and adequate space is afforded for circulation along the interior streets and within the parking lots.

This criterion also requires shading of surface parking areas. A shading study has been provided that demonstrates 30% or greater shading of the three interior parking lots. Shading is achieved with new shade trees required by this criterion. **(Affirmative finding)**

(m) Landscaping and fences

A comprehensive landscaping plan has been provided and includes an extensive mix of new trees, shrubs, and perennials. Trees will line all of the parking areas and interior streets. A line of new street trees is proposed along Grove Street and has been reviewed and approved by the City Arborist as required. The center green features a small grove of apple trees and community garden space. Other edible plantings within the project include strawberries, black berries, raspberries, and high bush blue berries. Generally, the proposed landscaping is used to provide boundaries between interior spaces and to soften transitions between buildings and pavement. Split rail fencing will be installed to follow the eastern "ridgeline" along the clearing boundaries of the site. It too will provide a boundary between the developed and wooded portions of the property.

The existing 59' tower structure immediately along Grove Street will be retained as required. Details pertaining to the renovation of this former industrial structure have been provided. The structure will be cleaned up and will have a new publicly accessible pavilion on top. The top of the structure affords significant views over the site and the river below. As such it is intended to serve as both an overlook and a memorial to the former industrial site. **(Affirmative finding)**

(n) Public plazas and open space

Substantial open space will be available for use by residents of the development. A large center green is proposed and may be used for active or passive recreation. A clubhouse and community pool are also provided. Two pavilions will provide sheltered space for outdoor activities. Links to trails will be provided and will afford access into the wooded portions of the property. Two "community garden" sites are also depicted on the final plat plans. These gardens will be available only to residents of the development. **(Affirmative finding)**

(o) Outdoor lighting

See Sec. 5.5.2.

(p) Integrate infrastructure into the design

Substantial new infrastructure will be required to support the proposed development. A utility plan and details sheet have been provided. All utility lines must be buried.

Several dumpster pad locations are evident on the site plan. The project plans provide details specifying concrete pads with full enclosures (fiber cement board siding with wire fence gates). As recommended by the DAB, the dumpster in front of duplex H should be relocated further away from the duplex.

The larger apartment buildings will have interior wall-mounted mail boxes. The duplexes will share an exterior “gang” box. The proposed “gang” mail box is a standard metal cabinet. As recommended by the DAB, a roof (with supports similar to the pavilions) should be provided over this “gang” mailbox.

A utility plan has been provided and depicts the location of utility “hot boxes” and HVAC pads as required. Most are placed away from the interior streets, and all appear to be screened with landscaping. **(Affirmative finding as conditioned)**

Part 3, Architectural Design Standards

Sec. 6.3.2, Review Standards

(a) Relate development to its environment

1. Massing, Height, and Scale

The final plat plans include an improved variety of building types. There are more duplexes (there are 9 now). Some previously proposed larger apartment buildings have been replaced by a cluster of 6-unit buildings. A previously proposed 33-unit building has been replaced with two separate buildings (21 and 6 units). A full story has been eliminated from building “I”. The largest apartment buildings, (J, R, T, and S) remain essentially unchanged. As required, building labeling has been cleaned up for consistency between the site plans and elevation drawings. The maintenance garage, however, is mislabeled as a second building “G” (it should be Q). Perspective images have also been improved to depict the buildings as they are shown in the elevation drawings.

The duplexes provide an appropriate starting point for the new development along Grove Street. Their massing, height, and scale is similar to that of existing residences along the street. This is the single most important consideration under this criterion for new residential development.

Further into the development, the duplexes blend into a cluster of 6-unit buildings. The 6-plexes successfully read as large homes. They effectively utilize fenestration, porches, dormers, and other architectural details to provide some level of intricacy to these fairly large buildings. The larger structures, ranging from 21 to 44 units, all read as apartment buildings. These buildings incorporate a variety of porches, balconies, varying materials, and architectural details to avoid any large expanses of undifferentiated building mass. The buildings also appear more vertical than horizontal as required by this criterion. As recommended, an overall materials palate is proposed. Material selection and arrangement on individual buildings may vary to avoid exact replication.

The clubhouse building is dimensionally similar to what was depicted on the preliminary plat plans. As required, however, siding and fenestration has been changed to provide more a more vertical emphasis on the building's appearance.

Lastly, a new maintenance garage has been added to the final plat plans. This building is set into the hillside and will be minimally visible from most of the development. It will be most prominent as viewed from the clubhouse across the street. The building is a fairly small and reads as a basic garage structure clad in materials similar to those used elsewhere in the development. **(Affirmative finding as conditioned)**

2. Roofs and Rooflines

The duplexes include traditional gable roofs. The 6-unit buildings incorporate a hip roof design with roof dormers to enable living space. The proposed roof type is typical of residential development. The larger buildings are essentially gable-roofed structures. Within this gable roof form, differing planes and dormers break up the overall roof mass. The clubhouse building includes a gable roof with dormers, and the maintenance garage has a basic gable roof. **(Affirmative finding)**

3. Building Openings

Proposed fenestration in the duplexes and 6-unit buildings is typical for residential development and appears to consist primarily of double hung windows with grilles applied in a consistent pattern. There is more variation in the larger apartment buildings. That variation helps to define individual components within these larger structures. The clubhouse includes fenestration unique within the development and has been changed to exhibit a more vertical emphasis. The relatively unique fenestration appropriately helps to differentiate it from the residential buildings. Windows within the maintenance garage consist of basic awning units that serve to allow sunlight and fresh air into the building. Their basic appearance is consistent with the overall appearance of the garage. **(Affirmative finding)**

(b) Protection of important architectural resources

Buildings within the existing concrete plant are not historically significant. Their demolition will not adversely impact any important architectural resources. As noted previously, the existing tower structure immediately along Grove Street will be retained and made into a quasi-historical memorial to the long-time industrial use of the site. **(Affirmative finding)**

(c) Protection of important public views

See 6.2.2 (c) above.

(d) Provide an active and inviting street edge

The proposed development is large enough to amount to the creation of a new residential neighborhood. The final plat plans bring all of the structures close to the street at parallel angles. All of the buildings contain well defined, street-facing front entries (many with porches), and all are connected to the sidewalk network. **(Affirmative finding)**

(e) Quality of materials

Exterior building materials consist largely of varying types of vinyl siding (lap and shingle). Some brick veneer will be utilized on the largest apartment buildings and on portions of the clubhouse. Composite trim (5" wide) will be installed along with asphalt shingle roofing. Railings will be

metal, and extruded vinyl windows will be installed. Vinyl siding is not especially durable; however, during preliminary plat review, the Design Advisory Board and the Development Review Board found that vinyl could be acceptable depending on installation details. The final plat plans include detailed elevation drawings and perspective drawings. The applicant demonstrated installation details at DAB review. "J-channel" will not be used. **(Affirmative finding)**

(f) Reduce energy utilization

The proposed buildings must comply with the city's current energy efficiency requirements. As noted previously, the buildings will be constructed to be solar ready. **(Affirmative finding)**

(g) Make advertising features complimentary to the site

See Sec. 3.5.6 (a) 9.

(h) Integrate infrastructure into the building design

Vents are noted on the elevation drawings and are acceptably located on secondary elevations. No utility meters are evident. As recommended by the DAB, they must be depicted and screened. No rooftop mechanical equipment is proposed. **(Affirmative finding as conditioned)**

(i) Make spaces safe and secure

Building entries will be illuminated. Intercom systems are recommended to maximize the personal safety of the tenants. The Fire Marshal has approved the single site access. **(Affirmative finding as conditioned)**

Article 8: Parking

Sec. 8.1.8, Minimum Off-Street Parking Requirements

The subject property is located in the neighborhood parking district. As a result, each dwelling unit requires 2 parking spaces – a total of 464 parking spaces in this case. An additional 2 spaces are needed for the onsite rental office in the clubhouse building. Providing this many parking spaces results in a vast amount of asphalt. At preliminary plat, the Conservation Board, Design Advisory Board, and Development Review Board recommended that the applicant reduce the amount of parking spaces and seek a parking waiver with the understanding that all of the dwellings are efficiencies, 1-, and 2-bedroom units. The final plat plans reflect this reduction. See Sec. 8.1.15 for the requested waiver and associated parking management plan. **(Affirmative finding)**

Sec. 8.1.15, Waivers from Parking Requirements/Parking Management Plans

A comprehensive parking management plan has been submitted in support of the requested parking waiver. As noted above, the standard 2-space per dwelling unit parking requirement results in 464 parking spaces, plus 2 for the onsite administrative office. As proposed, 394 parking spaces will be provided (1.7 spaces per unit). The 394 parking spaces provided exceed the 309 bedrooms to be constructed. As many of the residential parking spaces are expected to be vacant during the day, the 2 office spaces will be shared with the residences.

Parking will be by permit only and will require registration with the apartment complex and display of a parking sticker. Covered parking will be fee-based, and surface parking will be first-come, first-served. Parking will be administered and enforced onsite. Violators will be towed. The parking management plan contains an analysis of factors (geographic location, proximity to

employment, bicycle storage, etc.) that may contribute to reduced vehicle ownership. No specific data is provided to support the downward adjustment in parking demand. Things such as onsite bike storage and proximity to recreation and employment may well reduce traffic generation and perhaps parking demand, but the results of the analysis lack substantiation. The single most important factor pushing parking demand down is the efficiency, 1-, and 2-bedroom unit types. This downward adjustment based on unit types can be substantiated by Institute of Transportation Engineers' data. The presence of an onsite Carshare VT vehicle is also a significant factor and provides a viable transportation opportunity for residents without a personal vehicle. Importantly, the parking management plan includes an executed agreement between the applicant and Carshare VT.

Finally, the parking management plan notes that there is ample room onsite in the event that additional parking becomes necessary. Reoriented and additional parking spaces could be provided around the center green. This adjustment would bring the parking ratio up to 1.8 spaces per unit. Beyond that, there remains space available for a full complement of parking. The management plan as proposed makes either scenario unnecessary. **(Affirmative finding)**

Sec. 8.2.5, Bicycle Parking Requirements

The final plat plans contain bike parking details. The project requires 58 long term spaces and 23 short term spaces. As proposed, at least 86 long term spaces and 72 short term spaces will be provided. Long term spaces will be provided within the parking garages. Short term spaces will be provided in a series of bike racks next to the apartment buildings throughout the site. **(Affirmative finding)**

Article 9: Inclusionary and Replacement Housing

Sec. 9.1.5, Applicability

As the proposed development includes more than 5 new dwelling units, it is subject to the inclusionary housing provisions of this Article. Fifteen percent of the total unit count must be inclusionary (15% of 232 is 35 dwelling units). The application notes that these 35 inclusionary units will be provided. Approval from the manager of the city's Housing Trust Fund has been obtained. This approval stipulates that the mix of inclusionary unit types reflects the mix of unit types generally within the development. This stipulation will be included as a condition of approval. **(Affirmative finding as conditioned)**

Sec. 9.1.18, DRB Review of Proposal for Phasing & Sec. 9.1.19, Timeline for Availability/Phasing of Inclusionary Units for Issuance of Certificate of Occupancy

As noted previously, a phasing schedule for the entire project has been submitted. The applicant has provided supplemental information by way of email correspondence dated April 13, 2015 from Patrick O'Brien to Scott Gustin. This supplemental information articulates how provision of inclusionary units will be integrated into the phasing schedule. As proposed, the inclusionary units will be located in multiple buildings within the development. Phases 1A & 1B, 2A & 2B, and 3A will include the construction of all 35 inclusionary housing units. This proposal satisfies Sec. 9.1.19, which specifically requires that inclusionary units be made available for occupancy on approximately the same schedule as the project's market rate units.

As an alternative, the applicant requests the ability to lengthen the period of time for providing the inclusionary units. As requested, all inclusionary units would be provided, possibly in one building, prior to occupancy of the 200th unit in the development. This alternative would require

that the Development Review Board change its preliminary plat stipulation that all of the inclusionary units be built either first or at a rate consistent with the build-out of the market-rate units. **(Affirmative finding as conditioned)**

Article 10: Subdivision

No subdivision of land is included in this proposal. Several lot line adjustments with abutting properties are included. The required boundary survey done by a VT licensed surveyor is included in the final plat application. **(Affirmative finding)**

Article 11: Planned Unit Development

Sec. 11.1.6, Approval Requirements

(a) Lot coverage requirements of the district shall be met

The coverage limit is 35% in the RL zone, but may reach 50% with bonuses. The plans note 42.8% coverage of the buildable area. **(Affirmative finding)**

(b) The minimum setbacks required for the district shall be met

As noted previously, front, side and waterfront setbacks are compliant. **(Affirmative finding)**

(c) The minimum parcel size shall be met if the project is located in a RL or RL-W district

The two acre minimum lot size requirement for PUD has been met. **(Affirmative finding)**

(d) The project shall be subject to design review and site plan review of Article 3, Part 4

See Article 3 above.

(e) The project shall meet the requirements of Article 10 for subdivision review

See Article 10 above.

(f) All other dimensional, density, and use requirements of the underlying zoning district shall be met as calculated across the entire project

Three apartment buildings exceed the standard 35' limit. Sec. 5.2.6 (b) and the associated retention and renovation of the tower structure along Grove Street enable doing so. **(Affirmative finding)**

(g) Open space or common land shall be assured and maintained in accordance with the conditions as prescribed by the DRB

Significant open space will be provided and will afford opportunity for passive and active recreation. Project plans indicate that the open space lands will be maintained by the project owner. **(Affirmative finding)**

(h) The development plan shall specify reasonable periods within which development of each phase of the planned unit development may be started and shall be completed. Deviation from the required amount of usable open space per dwelling unit may be allowed provided such deviation shall be provided for in other sections of the planned unit development.

A nearly 4-year build-out has been requested. A phasing plan has been provided and separates the project into distinct components and specifies time frames for each. **(Affirmative finding)**

(i) The intent as defined in Sec. 11.1.1 is met in a way not detrimental to the city's interests

Sec. 11.1.1, Intent

- (a) *Promote the most appropriate use of land through flexibility of design and development of land;*

Removal of a nonconforming industrial use and replacement with residential development is conceptually appropriate. The final plat plans are a significant improvement over previous renditions and address the preliminary plat conditions to revamp the development. The revisions result in a more cohesive neighborhood that relates to the existing built environment while providing a sensitive transition to larger scale structures further into the development. **(Affirmative finding)**

- (b) *Facilitate the adequate and economical provision of streets and utilities;*

Multiple residences will be served by shared streets and utilities within the development. Construction of the residences and supporting infrastructure is included in the same development. **(Affirmative finding)**

- (c) *Preserve the natural and scenic qualities of open space;*

Open space will remain, and much of it will contain protected natural features like wetlands and riparian corridors. **(Affirmative finding)**

- (d) *Provide for a variety of housing types;*

The final plat plans incorporate a broader variety of housing types. Residential structures now include 2-, 6, 20+, 30+, and 40+ unit buildings. Unit types will be efficiency, 1-bedroom, and 2-bedroom. **(Affirmative finding)**

- (e) *Provide a method of development for existing parcels which because of physical, topographical, or geological conditions could not otherwise be developed; and,*

Not applicable. The subject property does not need to be developed as a PUD, but it may be.

- (f) *Achieve a high level of design qualities and amenities.*

The Design Advisory Board unanimously recommended approval of the final plat plans. Building details have evolved and improved since preliminary plat. Equally important, building layout has been revised to strengthen the interior streetscape. Substantial recreational, garden, and other open space will be provided. The grounds will be dotted with edible landscaping. An onsite clubhouse and pool will be constructed, and covered parking will be provided. The development will be managed with an onsite administrative staff. Overall, the final plat plans incorporate a high level of design quality and amenities. **(Affirmative finding)**

- (j) *The proposed development shall be consistent with the Municipal Development Plan*

See Sec. 3.5.6 (b) 10.

II. Conditions of Approval

1. Within 180 days of the date of final approval, the property plat mylar, with all applicable endorsement signatures, shall be filed with the City Clerk per Sec. 10.1.11 of the Comprehensive Development Ordinance. Failure to do so shall render void the final plat approval.

2. **Prior to release of the zoning permit**, revised project plans shall be submitted, subject to staff review and approval. The revised plans shall incorporate the following:
 - a. All details noted in “red” in the February 24, 2015 email from DPW engineer Steve Roy to Bryan Currier;
 - b. Resolution of the three items called out in the March 26, 2015 letter from fire marshal Barry Simays to Scott Gustin;
 - c. Adjustments and additional information as outlined in the April 9, 2015 memo from DPW engineer Laura Wheelock to Scott Gustin;
 - d. Conditions of the Design Advisory Board’s March 10, 2015 review of this project (except for condition 2);
 - e. Merger of lots A, B, and C into a single parcel to be reflected in the boundary survey & boundary adjustment plan;
 - f. A pedestrian path from the northwest corner of the duplexes’ parking lot to Grove Street;
 - g. Relocation of the dumpster in front of duplex H further away from that residence;
 - h. Provision of a roof (with supports similar to the pavilions) over the duplexes’ gang mailbox;
 - i. Corrected labeling of the maintenance garage as building Q; and,
 - j. Utility meter locations and screening.
3. **Prior to issuance of a certificate of occupancy**, the project engineer must certify in writing that, among other things, the project EPSC plan as approved by the Department of Public Works has been complied with and final site stabilization has occurred. This certification shall be filed with the Department of Planning & Zoning.
4. **At least 7 days prior to issuance of a certificate of occupancy**, impact fees calculated on the net new square footage of the development shall be paid to the Department of Planning & Zoning. Impact fees may be reduced as determined by the manager of the City’s Housing Trust Fund for the provision of inclusionary housing units.
5. **Prior to issuance of a certificate of occupancy**, the project engineer must certify in writing that, among other things, the project EPSC plan as approved by the Department of Public Works has been complied with and final site stabilization has occurred. This certification shall be filed with the Department of Planning & Zoning.
6. All construction within the public right-of-way (including, but not limited to, the walkways for the Grove Street duplexes) shall require an encumbrance permit and/or license subject to approval by the City Council in consultation with the Department of Public Works.
7. A 72-space parking waiver is included in this approval. This waiver is contingent on the implementation of the February 16, 2015 parking management plan. Implementation does not include new or reconfigured parking spaces. Any new or reconfigured parking will require separate zoning permit review.
8. This approval incorporates the Stormwater Administrator’s 3/23/15 written approval of the Erosion Prevention and Sediment Control Plan.
9. This approval incorporates the Stormwater Administrator’s 3/23/15 written approval of the Stormwater Management Plan.
10. This approval incorporates the proposed improvements to Schmanska Park’s access and parking lot as agreed to by the Department of Parks & Recreation dated November 24, 2014.
11. The proposed development sign is subject to a separate zoning permit and is not included in this approval.

12. This project approval includes all "Recommended Mitigation Measures" and pedestrian improvements as noted in the October 2013 Traffic Impact Study and March 25, 2015 Grove Street Development – Review of March 2015 Traffic Improvements memo, respectively.
13. This project approval includes the 2/13/15 "Phasing Plan" and related 2/16/15 "Anticipated Construction Phasing Schedule." Phases 1A & 1B, 2A & 2B, and 3A shall include construction of all 35 inclusionary housing units. Alternation of this schedule shall require separate zoning permit review.
14. Days and hours of construction shall be Monday-Friday 7:00 am – 5:00 pm; Saturdays 8:00 AM – 3:00 PM. No construction on Sunday.
15. A State Wastewater Permit will be required for water and sewer service. It is the obligation of the owner/applicant to seek this and any other required additional permits.
16. Building intercom systems are recommended to maximize the personal safety of the tenants.
17. Standard Permit Conditions 1-15 as adjusted for the proposed phasing and build-out schedule.

Scott Gustin

From: Patrick O'Brien <pobrien@SDIRELAND.COM>
Sent: Tuesday, February 24, 2015 3:24 PM
To: Scott Gustin
Cc: Bryan Currier; Steve Roy
Subject: FW: Grove Street Water/Sewer Review

Hello Scott, if you follow this email trail you will see that Steve Roy has a few minor requests and is ok having them be conditions of approval. What do you think?

His original comments are in black and our reply is in blue and his final comments are in red and those are the ones I am referring to.

Patrick

From: Bryan Currier [mailto:bcurrier@olearyburke.com]
Sent: Tuesday, February 24, 2015 3:21 PM
To: Patrick O'Brien
Subject: FW: Grove Street Water/Sewer Review

Patrick,

Steve Roy has submitted some minor revisions he would like us to correct on the water and sewer detail sheets. He said that he was alright with having the changes be made part of our conditions of approval for the final application, since we have already submitted to the City.

Thanks,
Bryan

From: Steve Roy [mailto:SRoy@burlingtonvt.gov]
Sent: Tuesday, February 24, 2015 3:10 PM
To: Bryan Currier
Cc: Paul O'Leary; pjobrien66@comcast.net; Norm Baldwin
Subject: RE: Grove Street Water/Sewer Review

Sure. As long as it makes into the construction-ready set of drawings.

Steve

From: Bryan Currier [mailto:bcurrier@olearyburke.com]
Sent: Tuesday, February 24, 2015 3:08 PM
To: Steve Roy
Cc: Paul O'Leary; pjobrien66@comcast.net; Norm Baldwin
Subject: RE: Grove Street Water/Sewer Review

Good Afternoon Steve,

Unfortunately, the plan set has already been submitted for Final Approval. Can we make these changes a condition of approval? We are expecting to have a few conditions from the board that are going to have to incorporate into the plans.

Let me know if you have any questions

Thanks,
Bryan

From: Steve Roy [<mailto:SRoy@burlingtonvt.gov>]
Sent: Tuesday, February 24, 2015 2:33 PM
To: Bryan Currier
Cc: Paul O'Leary; pjobrien66@comcast.net; Norm Baldwin
Subject: FW: Grove Street Water/Sewer Review

Hi Bryan,

Sorry this took so long. My DRAFT comments below are in RED.

Thanks,
Steve

Steve Roy, PE
Burlington Public Works
53 Lavalley Lane
Burlington, VT 05401
T: 802.865.7258
F: 802.864.7653

From: Bryan Currier [<mailto:bcurrier@olearyburke.com>]
Sent: Thursday, January 15, 2015 9:10 AM
To: Steve Roy
Cc: Paul O'Leary; Guillermo Gomez; Norm Baldwin; Patrick O'Brien (pobrien@SDIRELAND.COM)
Subject: RE: Grove Street Water/Sewer Review

Good Morning Steve,

Please find below our responses below to the Burlington Public Works review of the water/sewer systems for the proposed 243 unit apartment complex at 140 Grove St.

Water Comments:

1. The Utility Plan (Sheet S3) calls for C900 pipe but the Water Detail (Sheet S16) has a DI pipe specification under PVC Pipe and DI fittings. Change S16 sheet to include the C900 DR14 (305 psi) PVC pipe spec and C907 for molded PVC fittings. Include tracer wire, tracer wire test stations (if valves are >500' apart) and magnetic warning tape stating "Caution – Buried Water Line Below" ~~approximately 3' below grade. We use tracer wire and test stations from Copperhead Industries.~~

Sheet S16 – Water Details has been updated to include the C900 DR14 (305 psi) PVC pipe spec and C907 for molded PVC fittings. The typical water trench detail has been updated to include tracer wire from Copperhead Industries as well as warning tape. Tracer wire test station were not required because the valves are <500' apart.

Sheet S16 still contains references to DI pipe in Section 1.2 and 1.8 . Hydrant detail still shows DI pipe as well. Change thrust block on hydrant elbow to 2'x2'x3' precast.

2. Add/Move valves to have valves on each leg of a tee.

Sheet S3 – Utility Plan has been updated to have gate valves on each leg of the tees proposed with the new 8" C900 water main. OK, great.

3. Sprinklered building I needs a fire hydrant within 100' per NFPA 1.

Sheet S3 – Utility Plan has been updated to show a proposed hydrant within 100' of Building I. The hydrant is proposed to be located west of the building. OK, great.

4. Hydrant doesn't meet City specifications. I will send our detail sheet with this review sheet.
Sheet S16 – Water Details has been updated to have the hydrant detail meet City specifications.

Section 1.6 on fire hydrant does not include City requirements. We've worked with the local suppliers to develop a Kennedy "Burlington Spec" hydrant. Please just reference that.

5. Add mechanical restraint at all fittings in addition to thrust blocking.

Sheet S16 – Water Details has been updated to have the thrust block detail include mechanical restraint at all fittings.

Section 1.3 (incorrectly called 1.2) on Sheet S16 only references retainer glands on vertical bends and not everywhere as you said above. Also PVC pipe requires a restraint specifically for PVC pipe. Reference Megalug 2000PV or equal.

6. See Burlington Water Details Sheet for valve specification.

Sheet S16 – Water Details has been updated with a valve specification that meets the city's standards.

As per our Detail Sheet all valves in Burlington are open right (clockwise). Please add to Section 1.4.

7. Agreements and easements are required for the off-site water line extension.

All of the agreements and easements have been obtained for the off-site water line extension. OK, great.

8. Even though our hydraulic model says the water main extension from Colchester Ave is sufficient, the cost of upsizing this main to 10" is negligible and would provide an added factor of safety.

The proposed water main (C900 PVC) will have an inner diameter of at least 8". Fine.

9. Consider elimination of dead ends by looping water mains around the site.

Due to the added expense and expected water pressures we are not proposing to loop the water mains around the site. Fine.

Sewer Comments:

1. DPW will take ownership, operation and maintenance of the proposed pump station if the following conditions are met:

It is our intent to have the City of Burlington take ownership, operation and maintenance of the proposed pump station. Fine.

a. The proposed Multitrode pump controller is replaced with our standard Siemens/Evoqua LC150 duplex pump controller with A1000 pressure transducer and backup float.

Sheet S14 – Pump Station Details has been updated to have the controls replaced with the city's standard controls with transducer and backup float. OK, great.

b. A Mission Communications M-800 Real Time monitoring system be installed and wired to temporarily disable the pump station when a signal is received from CSO manhole R1.12 on Colchester Avenue. With its built in digital and analog inputs, add wet well level, pump status/runtimes, high and low wet well alarms, and power failure.

Sheet S14 – Pump Station Details has been updated to include the real time monitoring system. OK, great.

c. The control panel include an auxiliary power hookup for a future generator purchase.

Sheet S14 – Pump Station Details has been updated to include auxiliary power hookups for a future generator. OK, great.

d. A pump is selected with the best possible total efficiency (pump plus motor). If the horsepower is greater than 5, then three phase power is required.

The pump is expected to be around 7.5 hp and will be required to have three phase power. OK.

e. The panel is UL listed.

Sheet S14 – Pump Station Details has been updated to have the panel be UL listed. OK, great.

f. An easement is drafted allowing city personnel to access the site for pump station and force main maintenance.

Sheet S3 – Utility Plan has been updated to show an access easement to the City for pump station and force main maintenance.

There's nothing found on S3 pertaining to this. Easement will need to be a separate, legal, document.

g. The access road to the station is expanded and paved for better access to the wet well, storage tanks and valve pit.

Sheet S3 – Utility Plan has been updated to show the access road being expanded and paved for better access to the station

In order to clean the wetwell and storage vaults the front end of our Vactor needs to be within 6' of the access manholes. Please make the necessary modifications to enable us to clean these structures.

- h. The force main material is changed from PVC to fusion-welded HDPE with an attached tracer wire that terminates in the valve pit and at a test station in the right-of-way near the existing sewer manhole. The force main design should address the relatively high coefficient of thermal expansion of HDPE.

Sheet S13 – Sewer Details has been updated to change the force main to fusion-welded HDPE with attached tracer wire. The test station in the right of way has also been included. The force main design has addressed the relatively high coefficient of thermal expansion of the HDPE pipe by burying the pipe at minimum 6' underground where the temperature fluctuation is minimal.

Provide specification on HDPE force main (i.e. SDR, IPS or DIPS).

- i. The force main out of the wet well remains as ductile iron until after the valve pit cross.

Sheet S14 – Pump Station Details has been updated to have the force main out of the wet well remains as ductile iron until after the valve pit cross. OK, great.

- j. The wet well bracket get moved up close to the access hatch.

Sheet S14 – Pump Station Details has been updated to have the wet well bracket moved up closer to the access hatch. OK, great.

2. Given this station's size and proximity to buildings S and T, consider adding an activated carbon vent pipe on the station wet well to reduce potential odors.

Sheet S14 – Pump Station Details has been updated to include an activated carbon vent pipe on the station wet well and storage tanks.

Provide specification.

3. This note is just a comment that the gravity sewer pipes seem quite deep. As seen in the review above, we try and keep them in the 5' to 9' depth whenever possible.

Due to the topography of the site and the state separation requirements the sewers have been designed with a min depth of 6.61' and max depth of 13.21' with an average depth of 10.02'. Fine.

You had previously stated that Champlin Associates was the local rep the city uses for pumps and controls. Please see below the comments from Jon Champlin that have also been included on Sheet S14 – Pump Station Details.

Please let me know if you have any questions

Thanks,
Bryan

From: Bryan Currier
Sent: Tuesday, December 02, 2014 8:58 AM
To: 'Jonathan Champlin'

CC: Paul O'Leary
Subject: RE: Grove Street Water/Sewer Review

Good Morning Jon,

Thank you very much for your comments. I have included the changes in the plans. We will not be requiring explosion proof pumps.

Thanks,
Bryan

From: Jonathan Champlin [<mailto:jon@champlinassociates.com>]
Sent: Monday, December 01, 2014 6:05 PM
To: Bryan Currier
Cc: Paul O'Leary
Subject: RE: Grove Street Water/Sewer Review

Hi Bryan-

Couple of notes:

Floats should be mechanical, mercury not allowed in the state.
Plan mentions intrinsically safe. Should the pumps be explosion proof as well?
Pump condition is looking to be a 7.5 HP so 3 phase power would be required by City.

Let me know if you have any questions.

Jon Champlin

From: Bryan Currier [<mailto:bcurrier@olearyburke.com>]
Sent: Monday, December 01, 2014 1:22 PM
To: Jon Champlin (jon@champlinassociates.com)
Cc: Paul O'Leary
Subject: Grove Street Water/Sewer Review

Good Afternoon Jon,

I am working on a 243 unit development project for SD Ireland located at 140 Grove St Burlington. We have submitted a set of water/sewer plan to the City of Burlington Public Works and Steve Roy has given us his comments (see attached). He mentioned that Champlin Associates is the local rep they use for the pump station controls and pumps. Can you please take a quick look at the pump station designs (see attached) and let me know if you have any additional comments on the stations configuration.

Thanks,

Bryan Currier, EIT
O'Leary-Burke Civil Associates
1 Corporate Drive | Essex Jct., VT 05452
p: (802)878-9990
bcurrier@olearyburke.com

From: "Roy, Steve" <SRoy@burlingtonvt.gov>
To: pjobrien66@comcast.net
Cc: "Guillermo Gomez" <ggomez@burlingtonvt.gov>, "Norm Baldwin" <nbaldwin@burlingtonvt.gov>
Sent: Thursday, November 20, 2014 8:40:21 AM
Subject: Grove Street Water/Sewer Review

Hi Patrick,

Here are my comments on your development plans for water & sewer. Please forward to Paul O'Leary after you've had a chance to review, and let him know that Champlin Associates is the local rep for all the control stuff we use as well as pumps. I am happy to sit down with you folks to discuss further.



Fax (802) 658-7665

Burlington Fire Department
Office of the City Fire Marshal

132 NORTH AVENUE • BURLINGTON, VERMONT 05401



(TTY) (802) 865-7142

Plan Review and Inspection Services: (802) 864-5577

Public Information and Education: (802) 864-6923

www.burlingtonvt.gov/fire

RECEIVED

26 March 2015

MAR 27 2015

Mr. Scott Gustin, Project Manager.
Department of Planning and Zoning
City of Burlington
149 Church Street
Burlington, VT 05401

DEPARTMENT OF
PLANNING & ZONING

RE: Final Plat Review – 140 Grove Street (S.D. Ireland property, Grove Street Apartments): 15-0801PD

Mr. Gustin,

I have completed review of the final plat plan set dated 3 September 2014 and prepared by O'Leary – Burke Civil Associates, PLC for this project. This set of plans was stamped as received by the Department of Planning and Zoning on 18 February 2015 and provided to this office for review on 23 February 2015.

I have reviewed this final plat plan against the applicable requirements of Burlington Code of Ordinances Chapter 13, Vermont Fire and Building Safety Code (2012), and NFPA 1 (2012) pertaining to fire department site access, water supply, and fire protection system requirements and note that no additional modifications to this plan, beyond those documented below, are required at this time based on the information provided by the applicant.

Based on this full set of plans, the following items are called out for resolution:

1. **Sheet S5: Relocate the existing fire hydrant located at the intersection of Chase Street and Grove Street to the south on Grove Street approximately 25 feet to alleviate a long-standing turning radius obstruction for fire apparatus turning south on Grove Street from Chase Street.** Relocation of the existing fire hydrant will also negate the requirement for a protective bollard. The current parking arrangement on Chase Street, the location of the hydrant and bollard on Grove Street, and the location of the utility pole on Grove Street opposite the hydrant have significantly restricted the ability for our larger fire apparatus to turn from Chase Street onto Grove Street for a number of years.

(Note: this requirement has not been previously called-out as this department was not provided with a set of off-site improvement plans prior to the set dated above.)

2. **Sheet S8: Speed bump removal and relocation: specification of new speed bump design is not provided for review.** This department approves the current "speed table" design as utilized in other City projects and as provided previously by the Department of Public Works Engineering Department.
3. **Resolution of BFD radio systems modifications (in accordance with BCO 13-63 through BCO 13-68):** The applicant advised this office in a letter dated 16 September 2014 that radio signal strength testing was completed by Burlington Communications, and was determined to meet the minimum requirements for mobile and hand – held fire department radios under existing conditions. Additional radio signal strength testing shall be conducted by an approved technician prior to completion of building construction and, if required, modifications conducted to boost signal strength in the event that the minimum requirements of BCO 13-63 to 68 are not met at

that time. Additionally the applicant has corresponded with the Chief Engineer of the Burlington Fire Department regarding additional BFD radio systems modification (installation and programming of BFD Channel 16 in the Burlington Emergency Communications Center). The applicant shall continue coordination with the Chief Engineer of the Burlington Fire Department to resolve this open issue prior to issuance of the certificate of occupancy for this project. This office requests that resolution of this issue be carried as a condition of the final certificate of occupancy for this project.

Please contact this office with any questions or comments pertaining to this review.

In Fire and Life Safety;

A handwritten signature in black ink, appearing to read 'Barry J. Simays', written over a horizontal line.

Battalion Chief Barry J. Simays, CFI
Fire Marshal



Office of Engineering
645 Pine Street, Suite A
Burlington, VT 05402
802.863.9094 P
802.863.0466 F
802.863.0450 TTY
<http://www.burlingtonvt.gov/DPW/>

Chapin Spencer
DIRECTOR OF PUBLIC WORKS

Norman Baldwin, P.E.
CITY ENGINEER

Memo

Date: April 9, 2015
To: City of Burlington Planning & Zoning
Patrick O'Brien - SD Ireland
From: Laura Wheelock P.E.
Public Works Engineer
Subject: SD Ireland Grove Street Development

RECEIVED
APR 10 2015
DEPARTMENT OF
PLANNING & ZONING

This memo is to certify the review of the work being proposed within the right-of-way for the above mentioned development/project. The review and comments are based on the 100% plan set as received February 18, 2015.

As reviewed by the Department of Public Works (DPW) we find the following:

1. The proposed improvements including but not limited to new sidewalk throughout the project area meets City Standards.
2. Improvements at the pedestrian crossings of Grove Street in the vicinity of the park and crossing north of the park as shown on the 100% plans are acceptable with signage, RRFBs, and bumpout for northern crossing.
3. DPW has reviewed the traffic plan with update provided 3/25/15 and recommendations. DPW has no further comments and accept the recommendations in the study.
4. At the north end of Grove Street the traffic study recommended moving the no parking here to corner sign 25'-0" to the south. The developer will be required to submit a traffic request to DPW for this recommendation which will need to be reviewed and approved by the DPW commission. DPW does not required approval of this recommendation prior to initiation of the project as it was only a recommendation of the study and not a requirement. DPW will require the developer to at least make the request.

April 9, 2015

RE: SD Ireland Grove Street Development

5. Clarifications to be made to the plans include:
 - a. Updating the crosswalk marking to match City Standard – This will be a 24" Paint with 24" clear space block pattern.
 - b. Updating the Car Parking and Roadway Area Detail to Match City Standard – This will be 3" of Asphalt, with 4-6" Fine Graded Crushed Stone, with 12" Dense Graded Crushed Stone. Typical Asphalt courses are 1" of Type IV over 2" of Type III.
 - c. Widening of the crosswalk ramps at the crosswalk at the park to be 6'-0", widening should happen to the south side of the crosswalk shown in the plans.
 - d. At the crosswalk from the parking lot to the park on the west side of the road, at minimum one tree should be removed to improve the alignment of the park path with the proposed sidewalk.
 - e. In the dividing island between Grove Street and the parking lot adjacent to the sidewalk DPW and Parks have asked that a permeable paver either open and filled with pea stone or closed and permeable be used in place of any vegetation. This treatment should also be considered in the narrow wedge that is created on the west side of the road between the proposed sidewalk and the new path leading into the Park.
 - f. The proposed sidewalk where the vehicle will cross the sidewalk should be constructed with an 8" thick section to meet DPW's standard at commercial drives. This includes, but is not limited to the drives at:
 - i. Garden Street
 - ii. Parks vehicle access into Schmanska Park
 - g. At the southern end of the project DPW has asked that the crosswalk markings at the 284 Grove Street development be removed from the project; as painting those crossings does not meet the DPW warrant for painted crosswalk.
 - h. At the look out structure the curb cut shown for bicycle access should either be removed as we do not require it be provided, or have a tapered approach so it allows for proper bicycle movement and does not resemble a curb ramp typical to a crosswalk.
6. DPW has asked that property lines and ROW boundaries be added to the all the plan sheets to clarify the work that is occurring in the various areas.
7. DPW is concerned with the placement of stairs within the ROW at Units B and C. It is our preference that no stairs be placed within the ROW should that area be required in the future. DPW is asking the DAB and DRB take our concerns regarding the placement of permanent structures in the ROW into consideration and remove the requirement placed on the developer to provide these connections at this location.

April 9, 2015

RE: SD Ireland Grove Street Development

DPW is in favor of providing a single pedestrian connection from to the north of Unit D that would connect the development's sidewalk network directly to the sidewalk on the east side of Grove Street.

Should a connection out the back of the Units be remain as a requirement the stairs should either:

- a. be pulled back so they do not encroach on the ROW
- b. connect the sidewalk to the stairs at Unit A and D and eliminate the stairs out of the units

Should none of these alternatives be found acceptable the developer will be required to enter a license with the City for the infrastructure that exists in the ROW. The lease will have a 10 year renewal with a 6 month revocation period should DPW require use of the ROW in this location. The developer will also be required to fully maintain the infrastructure within the ROW. License agreements are subject to approval of the City Council who will either approve or reject the use of the ROW and the license.

If you have any questions please contact me directly at LWheelock@burlingtonvt.gov or 802-540-0397.

Burlington Design Advisory Board

149 Church Street, City Hall
Burlington, VT 05401
www.burlingtonvt.gov/PZ/DAB
Phone: (802) 865-7188
Fax: (802) 865-7195

Matthew Bushy, Chair
Todd Thomas, Vice Chair
Ron Wanamaker
Sean McKenzie
Steven Offenhartz
Philip Hammerslough, Alt.
Jeremy Gates, Alt.



DESIGN ADVISORY BOARD Tuesday, March 10, 2015 Conference Room 12, City Hall, Burlington, VT MINUTES

Board Members present: Ron Wanamaker, Matt Bushey, Steve Offenhartz, Todd Thomas, Jeremy Gates (alternate), Phil Hammerslough (alternate)
Board Members Absent: Sean McKenzie
Staff: Scott Gustin, Mary O'Neil, Ken Lerner

Session I - 3:00-3:45 p.m.

15-0801PD; 140 Grove St (RL, Ward 1) Ireland Grove Street Properties
Final plat review of PUD to demolish existing concrete plant and buildings, construct 19 new buildings for 223 residential units, clubhouse, and maintenance building with associated road, parking, and site improvements

Also present:

Michael Dugan, Robin Jeffers, Scott Ireland, and Patrick O'Brien

Motion by Matt Bushey: I move we approve the proposal and forward to the DRB with the following recommendations:

1. Dumpster in front of unit H should be moved farther away from the adjacent duplex.
2. Intersperse the inclusionary units throughout the project.
3. Roof (with supports similar to pavilions) should be provided over the Garden Street exterior gang mailbox.
4. Pedestrian path should be added from 1st parking lot at NW corner to Grove Street.
5. As part of final plat approval:
 - a. Revised boundary survey to depict the merger of the two primary parcels on which the proposed development will be built;
 - b. Corrected labeling for the maintenance garage (i.e. should be building Q);
 - c. Depiction and screening of utility meters; and,
 - d. Installation of concrete crosswalks within the development if feasible.

2nd – Todd Thomas

Vote 6-0-0

Motion carries.

Session II - 3:45-4:30 p.m.

The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements to participate are encouraged to contact the Department of Planning & Zoning at least 72 hours in advance so that proper accommodations can be arranged. For information call 865-7188 (TTY users: 865-7142).

AN EROSION PREVENTION AND SEDIMENT CONTROL PLAN

FOR THE PROJECT AT:

140 Grove Street

HAS BEEN FILED WITH THE CITY OF BURLINGTON
STORMWATER MANAGEMENT PROGRAM IN ACCORDANCE
WITH CHAPTER 26 OF THE BURLINGTON CODE OF ORDINANCES

THIS REQUIRES THAT MEASURES BE INSTALLED OR TAKEN TO
PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING
WATERWAYS AND IMPACTING CITY INFRASTRUCTURE
(RIGHT OF WAY AND STORMDRAINS)

FOR QUESTIONS OR TO REPORT SEDIMENT LEAVING THE SITE
CALL 802-863-4501

~~This notice to be posted in full view at all times during earth
disturbance. Additional conditions on attached.~~

Megan
Moir

Digitally signed by Megan Moir
DN: cn=Megan Moir, c=US, o=City of
Burlington DPW, ou=Stormwater
Program, email=mmoir@burlingtonvt.gov
Reason: I am approving this document
Location: Burlington, VT
Date: 2015.03.23 21:27:22 -0400

Plan Approved by: _____

Burlington Stormwater Program

Date: _____



**Burlington Department of Public Works
Stormwater Program**

234 Penny Lane (Water Plant)

Burlington, VT 05401

PH: 802-540-1748 Email: mmoir@burlingtonvt.gov

PH: 802-863-4501 Email: gjohnson@burlingtonvt.gov



Erosion Prevention & Sediment Control Plan

This questionnaire and associated EPSC plan sheets are required for projects that:

- 1) Require Level II or III Certificate of Appropriateness or Major Impact zoning applications and which will disturb more than 5000 sq. ft. of land;
- 2) Do not require a zoning permit but which will disturb more than 15,000 sq. ft. of land; or
- 3) The Stormwater Program deems this level of detail necessary for the protection of receiving waters.

You must also provide an EPSC plan sheet(s) indicating the flow of stormwater, the locations of all erosion prevention and sediment control measures (silt fence, catch basin protection, stabilized construction entrances, erosion control matting etc.) and a detail sheet including any measures.

1. Project Location SD Ireland Grove St Concrete Batch Plant
2. Zoning Permit Address (if different from above): 100 Grove Street, Burlington VT 05401
3. Brief Project Description (i.e. building foundation, swimming pool, etc.)
Conversion of the existing concrete batch plant to a 232-unit apartment complex.
4. Owner Name: Ireland Grove Street Properties
5. Owner Mailing Address: 193 Industrial Ave, Williston VT 05495
6. Owner Phone: 802-863-6222 x242 6. Owner email: pobrien@sdireland.com
7. Contractor Name: SD Ireland ☐ Contractor not known at this time
8. Contractor Phone: 802-863-6222 x242 9. Contractor Email: pobrien@sdireland.com
10. Estimated Project Start Date 36-60 Months Estimated End Date _____
11. Area of Land Disturbance 570,000 sq. ft.
12. Total proposed (existing + new) amount of impervious: 6.62 sq. ft.
13. Estimated distance in feet from disturbance to nearest:
 - a. City Sidewalk or Street 0 ft
 - b. Drainage Ditch 0 ft
 - c. Catch Basin (storm drain) 0 ft
 - d. Lake/River/Stream 55 ft
14. Does your project require a State Construction Stormwater Permit (9020 or INDC) ? ☒ Yes ☐ No
(You will be required to submit proof of your authorization to discharge prior to initiation of earth disturbance).

*impervious = any surface off of which water runs off rather than infiltrates, including, but not limited to rooftops and paved/unpaved (gravel/packed dirt) driveways, walkways and patios

Required Plan Sheets:

14. Plan sheet(s) MUST BE ATTACHED showing the following:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Limits of disturbance | <input checked="" type="checkbox"/> Direction of stormwater flow on site |
| <input checked="" type="checkbox"/> Location of stockpiles (if any) | <input checked="" type="checkbox"/> Location of sediment control BMP's (silt fence etc.) |
| <input checked="" type="checkbox"/> Location of stabilized construction entrances | <input checked="" type="checkbox"/> Stabilization measures |
| <input type="checkbox"/> Phasing plan (if appropriate) | |

15. Detail sheet(s) MUST BE ATTACHED and include details for all EPSC measures listed on the EPSC Plan Sheet.

Additionally, notes must be included related to:

- ☒ Daily inspection of roadways and sweeping as necessary (mandatory)
- ☒ Dewatering measures (if applicable)
- ☒ Temporary site stabilization requirements
- ☒ Final site stabilization requirements
- ☒ Winter site stabilization (for disturbance after November 1)
- ☒ Inspection requirements

EPSC QUESTIONNAIRE

A) Do you anticipate the need for any dewatering of excavations during the construction? ☐ Yes ☒ No

- If yes, please indicate which plan sheet has details for how dewatering operations will be managed to prevent the discharge of sediment laden water. N/A

B) Will excavated soil be stockpiled on the site? ☒ Yes ☐ No (If yes, show locations and EPSC measures for stockpile on plan sheet)

- If no, where is the ultimate disposal of excess soil? N/A

C) Do you plan to park construction vehicles on or disturb City owned property like the greenbelt area? ☒ Yes ☐ No

- If yes, tell us how you agree to repair all disturbances or damage to City owned property and provide a written approval from the City allowing construction vehicles to park on City owned property.

As part of the project the public parking lot to Schmanska Park on Grove street will be upgraded along with adding handicap access to the park. Also, additional sidewalks will be added along Grove St and Patchen Rd.

- If no, then please monitor all construction and visitor vehicles and advise all not to park on City owned property.

E) Will stockpiles or disturbed soils be present and/or exposed after Nov. 1st of any construction year? ☒ Yes ☐ No

- If yes, tell us how you plan to stabilize any stockpile and/or disturbed soils.

Please refer to EPSC plans EC2 and EC3 for winter guidelines.

Do you agree to abide by the following conditions?

- ☒ Y ☐ N Applicant will call 863-4501 or email mmoir@burlingtonvt.gov at least 24 hours prior to initiating earth disturbance and submit the name and contact (cell phone and email) of the contractor and erosion control coordinator for the project
- ☒ Y ☐ N Applicant will post the attached notice in a visible location
- ☒ Y ☐ N I acknowledge that it is the responsibility of the owner and his/her representatives to ensure that:
 - o sediment does not enter surface water bodies (streams, ditches, ponds, lakes, wetlands etc.)
 - o sediment does not enter City conveyance infrastructure (catch basins, sewers etc.) and
 - o All sediment is removed from the city ROW (sidewalks and roadways) by the end of each work day.
- ☒ Y ☐ N Sediment control measures will be installed prior to the initiation of earth disturbance.

- ☒ Y ☐ N During the non-winter construction season (April 15 – November 1): After an initial 14 day period of initial disturbance, temporary or permanent stabilization (mulching, erosion control matting or tarps for stockpiles, or other approved method) of exposed areas and stockpiles will occur at the end of each work day unless:
- o Earthwork is to continue in the area within the next 24 hours and there is NO liquid precipitation forecast for the next 24 hours; or
 - o If work is occurring in a self contained excavation (no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation or utility trenches).
- ☒ Y ☐ N During the winter construction period from November 1 to April 15, any new disturbance must be temporarily or permanently stabilized (mulching, erosion control matting or tarps for stockpiles, or other approved method) will occur at the end of each work day unless:
- o Earthwork is to continue in the area within the next 24 hours and there is NO liquid precipitation forecast for the next 24 hours; or
 - o If work is occurring in a self-contained excavation (no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation or utility trenches)
- ☒ Y ☐ N The perimeter of the site and all BMPs will be inspected at the end of each workday to ensure that sediment will not leave the site. If sediment has travelled beyond the site boundary, it shall be swept up or otherwise removed and deposited on-site in an upgradient area at the end of each work day.
- ☒ Y ☐ N The owner and his/her representatives shall abide by the best management practices (BMPs) indicated in this plan and conditions and in the Vermont DEC Low Risk Site Handbook for Erosion Prevention and Sediment Control (2006). Contact 802-863-4501 for a hard copy or go to the web:
http://vtwaterquality.org/stormwater/docs/construction/sw_low_risk_site_handbook.pdf
- ☒ Y ☐ N If soils will be exposed after November 1st and winter construction has not been permitted the project will notify DPW prior to October 15th and ensure that sediment control is installed PRIOR to soil freezing. If the project is completed during the winter months, an additional inspection will be required to ensure that the site is buttoned up for the winter.
- ☒ Y ☐ N Within 48 hours of reaching final grading, the exposed soil will be seeded and mulched or covered with erosion control matting (for slopes steeper than 3:1 or high wind prone areas). Erosion control matting is preferred.
- ☒ Y ☐ N The owner will contact DPW to schedule a stabilization inspection when site work is finished and stabilization measures (seeding and mulching or matting) have been installed.

AGREEMENT

By filling out and signing this plan, I agree to abide by the terms and conditions outlined above. Failure to follow this plan can result in a stop work order by the City of Burlington, fines, or both.

By: ☒ Owner ☒ Contractor

Scott D. Ireland

Name

[Signature]

Signature

2-10-15

Date

Additional Conditions of Approval:



Megan Moir, CPESC, CPSWQ
Stormwater Program Manager

Direct 802 540-1748
cell 802 734-4595
mmoir@burlingtonvt.gov

Post Construction Stormwater Management Plan Acceptance

Location: 140 Grove Street

Project Description: Planned Unit Development with 19 new apartment buildings (232 units), with associated amenity buildings, road, parking and site improvements.

Plan submitted by: O'Leary-Burke Civil Associates, PLC

Acceptance of the Stormwater Management Plan by the Burlington DPW does not absolve the owner, contractor or engineer (if applicable) from taking additional actions to ensure compliance with Chapter 26 of the Burlington Code of ordinances and with the conditions listed below

The stormwater management plan involves the reduction of 3.58 acres of impervious and management of stormwater runoff from 6.62 acres of redeveloped impervious via impervious disconnections, rain gardens, under-drained grass swales and a detention pond before discharging to the Winooski River.

Specific Conditions:

- Stormwater measures must be installed and maintained in accordance with the plans, and other materials submitted to DPW, including, but not limited to any attached sheet(s).
 - *Prior to commencing earth disturbance, the stormwater designer must provide the following and obtain written approval by the Stormwater Program*
 - *Planting plans for rain gardens and pond area*
 - *Specifications for "bio-swale" media mix*
 - Prior to the issuance of the Final Certificate of Occupancy, the stormwater designer shall submit
 - an **initial statement of compliance** certifying that the stormwater management system has been installed in substantial compliance with the plans and conditions included within this approval
 - **as-built information** for all stormwater infrastructure (CB, MH, treatment/storage areas, subsurface pipes etc.) and impervious surfaces in a CAD or GIS format
-
- The stormwater measures shall be inspected and maintained by the property owner annually by **July 1**. The property owner shall maintain evidence of inspections and maintenance on-site for 7 years. The owner must, upon request by DPW, provide access to the measures for inspection by DPW.
 - A maintenance and access agreement consistent with Section 26-3-26(B)(6) and appropriate filing fees for filing with the City Land Records with the City Clerk's Office must be provided to DPW within 30 days of DPW's provision of said form.

Megan
Moir

Digitally signed by Megan Moir
DN: cn=Megan Moir, c=US, o=City of
Burlington DPW, ou=Stormwater
Program, email=mmoir@burlingtonvt.gov
Reason: I am approving this document
Location: Burlington, VT
Date: 2015.03.23 21:01:06 -0400

Plan Approved by: _____

Burlington Stormwater Program

Date: _____

RECEIVED
FEB 18 2015

Patrick O'Brien

Subject:

FW: Grove Street

DEPARTMENT OF
PLANNING & ZONING
EXHIBIT # 6

From: Jesse Bridges [mailto:jbridges@burlingtonvt.gov]
Sent: Monday, November 24, 2014 9:06 PM
To: Patrick O'Brien; Warren Spinner; Deryk Roach; Jen Francis
Cc: Scott Gustin
Subject: RE: Grove Street

Patrick,

This email serves to notice the Department's acceptance of the proposed improvements to Schmanska Park's access as well as its parking lot.

We appreciate your communication and cooperation.

Best,
Jesse

From: Patrick O'Brien [mailto:pobrien@SDIRELAND.COM]
Sent: Friday, November 21, 2014 9:03 AM
To: Warren Spinner; Deryk Roach; Jesse Bridges; Jeanne Francis
Cc: Scott Gustin
Subject: FW: Grove Street

To all, the improvements you requested yesterday have been incorporated into the attached plan.

Thank you,

Patrick

From: Bryan Currier [mailto:bcurrier@olearyburke.com]
Sent: Friday, November 21, 2014 8:46 AM
To: Patrick O'Brien
Subject: RE: Grove Street

Good Morning Patrick,

Changes have been made, see attached.

Thanks,
Bryan

From: Patrick O'Brien [mailto:pobrien@SDIRELAND.COM]
Sent: Thursday, November 20, 2014 4:30 PM
To: Bryan Currier
Subject: FW: Grove Street

Bryan, please put these two changes on your list.

Thank you

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FEB 18 2015

DEPARTMENT OF
PLANNING & ZONING

From: Warren Spinner [<mailto:WSpinner@burlingtonvt.gov>]
Sent: Thursday, November 20, 2014 4:00 PM
To: Patrick O'Brien
Cc: Jesse Bridges; Deryk Roach; Jen Francis; Scott Gustin
Subject: RE: Grove Street

Hi Patrick,

I have reviewed the adjusted landscape plans for the Grove St Apartments and Schamanska Park and Parking Lot. The adjustments for tree spacing, tree species and tree sizes are all correct on the plans so those have my approval.

Just want to confirm that the 4' 'Merchants' Metal fence has a break in it for our service road entrance into the park. Also the removable ballads need to be moved back behind the sidewalk in line with the fence. Those two corrections will need to be shown on the plans.

If you need an approval for those corrections for P&Z please send it to Jen or Deryk. Please let us know if you have any questions.

Thanks, Warren

From: Patrick O'Brien [<mailto:pobrien@SDIRELAND.COM>]
Sent: Thursday, November 20, 2014 9:55 AM
To: Warren Spinner
Cc: Jesse Bridges
Subject: FW: Grove Street

Warren, it would be greatly appreciated if you could get you final letter out soon. I can not submit for final application without it.

Thank you very much.

Patrick O'Brien
S.D. Ireland Companies
193 Industrial Avenue
Williston, VT 05495
Office 802-863-6222 x 242
Cell 802-373-0096
e-mail pobrien@sdireland.com

From: Patrick O'Brien
Sent: Wednesday, October 01, 2014 1:42 PM
To: 'Warren Spinner'; Jesse Bridges; Deryk Roach
Cc: Bryan Currier; Bonnie Kirn Donahue (bkirn@wagnerhodgson.com); Scott Gustin
Subject: RE: Grove Street

Warren, as promised here are the revised sheets. I look forward to receiving a letter from you that will satisfy the DRB condition.

Thank you,

Patrick

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FEB 18 2015

DEPARTMENT OF
PLANNING & ZONING

From: Warren Spinner [mailto:WSpinner@burlingtonvt.gov]

Sent: Wednesday, October 01, 2014 10:04 AM

To: Patrick O'Brien; Jesse Bridges; Deryk Roach

Cc: Bryan Currier; Bonnie Kirn Donahue (bkirn@wagnerhodgson.com); Scott Gustin

Subject: RE: Grove Street

Hi Patrick,

Thanks for sending these sheets along for our review and comment.

On sheet S8 'The park and parking lot', we will move/transplant the young tree that's currently in the way of the new proposed path. The one we planted this spring. The three trees proposed for the parking lot redesign shall be specified on the sheet/plans as: 2.5"-3" caliper B&B Acer freemanii 'Celebration'.

On the Grove Street Apartments 'Tree Plan', Bonnie you will need to modify the street tree placements as you enter the new development from Grove Street. There needs to be a clear site vision for vehicles at this intersection of a minimum of 30 feet in both directions as you enter Grove street. So I would suggest the first tree to the south as you exit on to Grove St be removed from the plan as well as the first two going north as you exit. Totaling 3 'Princeton Elm's being removed from the plan. You now can readjust the remaining five Elm trees in that north section of greenbelt.

The trees to the south of the project that you are proposing to plant 'around' are Green Ash. Planning ahead for the Emerald Ash Borer arrival which in time will kill all the ash trees in our area. I would encourage you to remove the Ash trees now and plant the whole section with new elm trees. It makes sense to do this now so you don't end up with a fragmented section of greenbelt when these Ash trees die and need to be removed.

That's all I have for comments related to landscaping at this point. Please let me know if you have any questions based on my comments.

Best, Warren



Warren Spinner, Certified Arborist

City Arborist

Burlington Parks, Recreation & Waterfront

645 Pine Street

Burlington, VT 05401

802-862-8245



@BTVparks

From: Patrick O'Brien [mailto:pobrien@SDIRELAND.COM]

Sent: Tuesday, September 30, 2014 9:26 AM

To: Jesse Bridges; Deryk Roach; Warren Spinner

Cc: Bryan Currier; Bonnie Kirn Donahue (bkirn@wagnerhodgson.com); Scott Gustin

Subject: Grove Street

RECEIVED
FEB 18 2015

DEPARTMENT OF
PLANNING & ZONING

Hello everyone, as previously mentioned, condition # 3 of my Preliminary Approval states that *"Prior to final plat application, written acceptance of the proposed improvements to Schmanska Park and its parking lot shall be obtained from the Dept. of Parks & Recreation"*.

I have attached sheet S8 of our plan set for your review and comment.

Also, condition # 4 states that *"Prior to final plat application, written acceptance of the proposed street trees along Grove Street Shall be obtained from the City Arborist"*.

Warren, you will see from the plan that I will be forwarding you that we are proposing some Elm trees along the street. You will also notice that we are proposing to plant some between the existing trees south of the project. Please let us know how you feel about that.

I asked Bonnie Kirn at HKW to turn on the existing tree locations and I have not received that plan yet but I will forward it to you as soon as I get it, which will likely be at some point this morning, or she may send them directly to you.

It would be great if you could offer your comments to us via email so we can incorporate them into the plans and then get a revised set back to you so you can write your letters.

As always, a rapid response would be GREATLY appreciated.

Thank you all,

Patrick

Patrick O'Brien
S.D. Ireland Companies
193 Industrial Avenue
Williston, VT 05495
Office 802-863-6222 x 242
Cell 802-373-0096
e-mail pobrien@sdireland.com

Traffic update

MEMO



TO: Patrick O'Brien
FROM: Ben Swanson
DATE: March 25, 2015
SUBJECT: Grove Street Development – Review of March 2015 Traffic Improvements

DEPARTMENT OF PLANNING & ZONING

In October 2013, RSG drafted the Traffic Impact Study (TIS) for the proposed Grove Street housing development in Burlington, Vermont. Since completion of this study, the applicant has been in discussions with Burlington Public Works (BPW) regarding the roadway and pedestrian improvements that will be completed by the applicant in association with this project. From these discussions, the following additional pedestrian improvements have been identified:

1. The proposed project will now install a second rapid rectangular flashing beacon (RRFB) at the mid-block crossing east of the Schmanska Park parking area. This existing pedestrian crossing will also receive a new bump-out to further improve pedestrian safety.
2. The section of Grove Street proximate to Schmanska Park will now be reduced to 24 feet.
3. The proposed site access width has been reduced from approximately 57 feet to approximately 43 feet at the pedestrian crossing. We understand this change was made at the request of Burlington DPW and has been reviewed and accepted by the Burlington Fire Chief.

These recent additions to the project plan further improve the pedestrian environment proximate to the project site. In conjunction with previously planned sidewalk, pedestrian crossing, and traffic calming elements, the proposed pedestrian improvements greatly enhance the existing infrastructure and provide an important pedestrian connection between South Burlington, Burlington, and Winooski.

Additionally, since completion of the original TIS, the total number of proposed residential units has decreased from 247 units (assumed in previous analysis) to 232 units. This results in a net decrease in overall site-generated traffic during both peak hours, as shown below. Any impacts from the project as currently proposed, would be slightly less than previously analyzed in the Traffic Impact Study. In addition to the substantial off-site pedestrian improvements planned for this project, and traffic impact fees levied by the City, we had previously recommended the applicant make a fair-share contribution towards large-scale improvements at the Colchester Avenue/Riverside Avenue/Barrett Street triangle and at the US 2/White Street intersection. Based on the updated trip generation, these contributions would be approximately \$5,500 and \$14,500, respectively.

FIGURE 1: PREVIOUS AND CURRENT SITE TRIP GENERATION

	Previous Study (247 Units)			Current Proposal (232 Units)			Net Change (-15 units)		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
AM Peak Hour	25	100	125	23	94	117	-1	-6	-7
PM Peak Hour	100	54	154	94	51	145	-5	-3	-8

Please feel free to contact us with any questions.



17. Using the City of Burlington's impact fee calculator, we calculate approximately \$53,600 in traffic impact fees to be associated with the proposed project.
18. We have also examined the proposed site access on Grove Street and have found that stopping and corner sight distances exceed design standards in both directions.
19. We conducted a turn-lane warrant assessment and found that a dedicated left-turn lane is not warranted on Grove Street at the site access.
20. We project average vehicle delays of less than 20 seconds per vehicle for traffic exiting the site driveway and expect the access to operate safely and effectively.
21. We have examined plans for proposed off-site traffic calming and pedestrian accommodation improvements prepared by O'Leary Burke Civil Associates including new sidewalks, crosswalks, new curbing, new lighting, and a proposed solar powered speed feedback display.
22. We believe the proposed pedestrian improvements greatly enhance the existing infrastructure. The proposed sidewalk section south of the project site provides a critical pedestrian link between South Burlington and Burlington and Winooski, creating a continuous pedestrian route between these areas. Additionally, improved curbing signage and striping at crossings north of the project site will help improve pedestrian safety for all pedestrians in the area.

11.2 Recommended Mitigation Measures

23. We recommend a cost sharing allocation be paid by the developer to the City of Burlington towards eventual improvements at the Colchester Avenue/Riverside Avenue/Barrett Street intersection triangle. This area currently experiences long delays and has been identified for future improvements by the Chittenden County Regional Planning Commission. While the proposed project does not cause this issue, we suggest the developer make a fair share contribution towards the ultimate intersection improvements based on the percent increase in peak hour traffic from the proposed project and the estimated cost of the overall improvement. Based on the larger peak hour percent increase in traffic (0.43% during the PM peak) and the estimated project cost (\$1.4 million)¹, we calculate a fair share contribution of approximately \$6,000.
24. We recommend a cost sharing allocation be paid by the developer to the City of South Burlington towards eventual improvements at the US 2/White Street intersection. This area currently experiences long delays and has been identified for future improvements by the Chittenden County Regional Planning Commission based on heavy use by existing traffic. While the proposed project does not cause this issue, we suggest the developer make a fair share contribution towards the ultimate intersection improvements based on the percent increase in peak hour traffic from the proposed project and the estimated cost of the overall improvement. Based on the larger peak hour percent increase in traffic (0.41% during the AM peak) and the estimated project cost (\$3.94 million)², we calculate a fair share contribution of approximately \$16,000.
25. Due to the high prevalence of rear-end collisions at the Patchen Road/White Street intersection we recommend advance intersection warning signs (MUTCD W3-3) be installed on both the eastbound and westbound, White Street, approaches to this intersection. Similar signs already exist on the northbound and southbound, Patchen Road approaches (Figure 36).

¹ The December 2011 Colchester Avenue Corridor Plan, conducted by Resource Systems Group indicated an approximate project cost of \$1.4 million to reconstruct the Colchester Avenue/Riverside Avenue/Barrett Street intersection triangle.

² The August 2007 US 2 Corridor Study, conducted by Resource Systems Group indicated an approximate project cost of \$3.94 million to reconstruct the US 2/White Street and US 2/Patchen Road intersections.



26. To enhance pedestrian connectivity and to improve pedestrian accommodations proximate to the project site, we recommend all off-site traffic calming and pedestrian enhancements identified by O'Leary Burke Civil Associates be installed prior to the first certificate of occupancy for the project.
27. In addition to the pedestrian enhancements proposed by O'Leary Burke Civil Associates we recommend the existing pedestrian warning signs at the crosswalk on Grove Street north of the paved public parking area (north of the project access) be upgraded to new fluorescent yellow warning signs (W11-2) and be accompanied by diagonal arrows indicating the crossing location (W16-7P) and that these signs be gate-posted for both northbound and southbound traffic prior to the first certificate of occupancy for the project. We recommend similar signage be installed at the second pedestrian crossing approximately 300 feet north of this parking area at the north end of the park.
28. Due to the tight turning radius for the southbound right-turn from Barrett Street onto Grove Street, we recommend the "No Parking Here To Corner" sign be relocated as indicated by O'Leary Burke Civil Associates, assuming Burlington Public Works is willing to accept the associated reduction in on-street parking.

In conclusion, we believe that if the above recommendations are followed, traffic associated with construction of the proposed Grove Street housing project will not cause unreasonable congestion or unsafe conditions on the surrounding road network.


